

**Dinâmica Econômica do
Capitalismo
Contemporâneo: Uma
Homenagem ao
Centenário de Michail
Kalecki**

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Apresentação

SEMINÁRIO INTERNACIONAL * DINÂMICA ECONÔMICA DO CAPITALISMO CONTEMPORÂNEO: UMA HOMENAGEM AO CENTENÁRIO DE MICHAL KALECKI

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O seminário proposto teve um duplo objetivo: 1) prestar uma homenagem póstuma ao notável economista polonês Michal Kalecki no centenário de seu nascimento e 2) discutir, com base em suas concepções ou, pelo menos, tomando-as como referência, os problemas atuais do crescimento e ciclo das economias capitalistas.

Michal Kalecki nasceu em 22/6/1899 e morreu em 17/4/1970. Sua carreira de economista começou no Instituto de Pesquisa de Conjuntura Econômica e de Preços, em Varsóvia. A partir de 1936, na Inglaterra, trabalhou na London School of Economics, na Universidade de Cambridge e depois na Universidade de Oxford (1940 a 1945). Em 1946, com o fim da Segunda Guerra, realizou pesquisa para a Organização Internacional do Trabalho, durante alguns meses atuou como conselheiro econômico do governo polonês e foi indicado para o departamento econômico do Secretariado da ONU, onde trabalhou até 1954, quando, então, retornou para a Polônia. Aí exerceu diversas atividades: diretor de pesquisas econômicas da Academia de Ciências, consultor do Conselho de Ministros, professor a partir de 1956, presidente da Comissão de Planejamento de Longo Prazo (1957-1960), vice-presidente do Conselho Econômico do Estado (1957-1963), etc.

Seus escritos foram recentemente reunidos em sete volumes, publicados em polonês e em inglês. Nesta última língua encontram-se em Collected Works of Michal Kalecki, publicados pela Clarendon Press, de Oxford, de 1990 a 1997, assim distribuídos: volume I, "Capitalismo: ciclos

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econômicos e plano emprego”; vol. II, “Capitalismo: dinâmica econômica”; vol. III, “Socialismo: funcionamento e planejamento de longo prazo”; vol. IV, “Socialismo: crescimento econômico e eficiência do investimento”; vol. V, “Economias em desenvolvimento”; vol. VI e VII, “Estudos de economia aplicada” de 1927 a 1940 e de 1940 a 1967. Esses dois últimos volumes englobam estudos (em geral breves) sobre uma grande diversidade de temas: mercados de produtos específicos, operações de trustes e cartéis, índices de flutuações econômicas, economia britânica durante e após a Segunda Guerra Mundial, etc. Mas são os outros volumes que incluem as obras mais relevantes de Kalecki; especialmente as de caráter teórico.

Foi durante seu trabalho no secretariado econômico da ONU que Kalecki voltou sua atenção para as economias subdesenvolvidas, tendo, inclusive, efetuado alguns estudos de casos (Israel, Índia, Cuba). Mas, nessa área, sua maior contribuição foi seu estudo sobre “O problema do financiamento do desenvolvimento econômico”, publicado originalmente no México em 1954 e que constitui um resumo de suas palestras no Centro de Estudos Monetários Latino-americanos em agosto de 1953. Embora não se possa afirmar com certeza que esse estudo tenha contribuído para formar a chamada “teoria estruturalista” da CEPAL, é possível encontrar muitos pontos comuns entre eles.

A partir de seu retorno definitivo para a Polônia, em 1955, depois de seu trabalho na ONU, Kalecki passou a dedicar-se também ao estudo das economias socialistas, daí resultando uma grande diversidade de escritos sobre o sistema de funcionamento dessas economias, seu sistema de preços, seu planejamento, as formas de avaliar a eficiência dos investimentos, etc., além de alguns problemas específicos da economia polonesa. Sua principal obra, entre todos esses escritos, é seu livro Introdução à Teoria do Crescimento de uma Economia Socialista (publicado em 1963 e, com diversas alterações, em 1966).

Mas os trabalhos de Kalecki que o tornaram mundialmente famoso referem-se às economias capitalistas desenvolvidas, principalmente os relativos à teoria da dinâmica econômica, envolvendo as questões do crescimento e dos ciclos dessas economias.

Nessa área, seu primeiro trabalho foi “Esboço de uma teoria do ciclo econômico”, publicado em polonês em 1933 e em francês e inglês em 1935; daí, até o fim de sua vida, Kalecki retomaria diversas vezes esse tema, na tentativa de formular um “modelo” mais completo dos ciclos, incorporando também o crescimento econômico. Seus esforços culminaram em 1954 com o livro Teoria da dinâmica econômica, que é sua principal obra sobre as economias capitalistas, onde apresenta a versão mais elaborada de diversos temas tratados em escritos anteriores: formação de preços e distribuição funcional da renda, determinantes dos lucros, dos investimentos e da renda nacional, ciclos econômicos, desenvolvimento econômico. Mesmo depois desse livro, continuou procurando aprimorar seu “modelo”, e sua última versão está no artigo “Tendência e ciclo econômico” publicado em 1968 no Economic Journal.

Embora Kalecki tivesse partido da teoria econômica marxista (influenciado não só por Marx mas também por Rosa Luxemburgo e Tugan-Baranovski, como ele próprio reconheceu), a partir da segunda metade da década de 1930 ele passa a ser identificado como um “keynesiano”. Isto porque uma parte considerável de sua teoria da economia capitalista coincide com a apresentada por Keynes em sua Teoria geral do emprego, do juro e da moeda (1936). Mas, é preciso ressaltar, os trabalhos de Kalecki sobre os problemas da demanda efetiva (que é o tema central da Teoria geral) foram publicados antes do livro de Keynes. De qualquer modo, desde então, nos meios acadêmicos britânicos, as idéias de Kalecki foram juntadas às de Keynes, de modo que, como assinalou Joan Robinson, tornou-se difícil separá-las na formação da chamada “macroeconomia keynesiana”.

Pode-se afirmar que até o início da década de 1970 a obra de Kalecki era pouco conhecida no Brasil, e mais por referência do que por leitura direta. Um passo importante no sentido de seu conhecimento ocorreu em 1974, quando a Associação dos Centros de Pós-Graduação em Economia (ANPEC) incluiu na bibliografia básica do concurso nacional para mestrado em Economia o livro Teoria da dinâmica econômica e, a partir daí, sua obra passou a ser estudada nas escolas de Economia, embora quase sempre relacionada com a Teoria geral do emprego, do juro e da moeda de Keynes. Outro passo importante foi a tradução para o português de muitos de seus escritos.

No Brasil, o primeiro trabalho de Kalecki a ser publicado foi um artigo, “Esboço de um método de construção de um plano perspectivo”, incluído no livro Programação do desenvolvimento econômico (São Paulo, Pioneira, 1969), que reunia as contribuições dos economistas estrangeiros, presentes no Seminário de Desenvolvimento Econômico, patrocinado pela UNESCO e realizado na cidade de São Paulo. O segundo foi seu livro Teoria da dinâmica econômica, publicado pela Abril Cultural na série “Os Pensadores” (1978) e depois na série “Os Economistas” (1983). Depois foram publicadas duas seleções de texto organizadas por Jorge Miglioli: Crescimento e ciclo das economias capitalistas (São Paulo, Hucitec, 1977) e Kalecki, na coleção “Grandes cientistas sociais” da Editora Ática (São Paulo, 1980). O livro Introdução à teoria do crescimento em economia socialista foi publicado em Portugal (1978) e depois no Brasil pela Brasiliense (São Paulo, 1982). Por fim, a coleção de textos sobre Economias subdesenvolvidas foi publicada pela Editora Vértice (São Paulo, 1987).

Também surgiu um grande número de obras de autores brasileiros relativas a Kalecki ou que se utilizam de suas concepções. Por exemplo, o livro de Assuero Ferreira, Limites da acumulação capitalista (São Paulo, Hucitec, 1996), constitui, como está explicitado no subtítulo, “um estudo da Economia política de Michal Kalecki”; toda a parte V do

livro de Jorge Miglioli, Acumulação de capital e demanda efetiva (São Paulo, T.A. Queiroz, 1982) é uma exposição da teoria da Kalecki sobre as economias capitalistas; todo o capítulo V do livro de Antonio Barros de Castro, O capitalismo ainda é aquele (Rio de Janeiro, Forense, 1979) é dedicado a uma crítica dessa teoria; o livro de Edmar Bacha, Introdução à Macroeconomia (Rio de Janeiro, Campus, 1982) se utiliza amplamente dessa teoria. Outros autores também recorrem a Kalecki em diversos pontos de suas obras, como, por exemplo, Maria da Conceição Tavares (Acumulação de capital e industrialização no Brasil, Campinas, Unicamp, 1986), Luis Bresser Pereira (Lucro, acumulação e crise, São Paulo, Brasiliense, 1986), Mario Luiz Possas (Dinâmica da economia capitalista, São Paulo, Brasiliense, 1987), etc. Além dos livros, há também um razoável número de artigos: Mário Possas e Paulo Baltar, “Demanda efetiva e dinâmica em Kalecki” (Pesquisa e Planejamento Econômico, vol. 11, nº 1, 1981) e “O modelo do ciclo econômico de Kalecki” (Revista de Econometria, ano 3, nº 1, 1983); E.A. da Silva, “O modelo de investimento de Kalecki” (Revista de Economia Política, ano 6, nº 2, 1986), etc.

Neste ano de centenário de nascimento de Michal Kalecki foram e estão sendo realizados seminários e conferências em diversos países, em sua homenagem. Também no Brasil ele merece ser reverenciado, por ter sido um grande economista que exerceu e continua exercendo influência sobre o pensamento econômico brasileiro.

Mas não se trata de uma reverência passiva, que se limita a avaliar ou apreciar a obra de Kalecki tal como ela se encontra. Isto seria contrário ao próprio caráter irrequieto e crítico desse autor, que durante toda sua vida dedicou-se a acompanhar as transformações da economia capitalista. Portanto, sendo uma genuína homenagem, o seminário aqui proposto tem como tema central exatamente essa dinâmica, levando-se em conta as contribuições de Kalecki para compreendê-la.

O programa do seminário é apresentado em seguida. Como se poderá observar, trata-se de um seminário internacional que reúne professores pesquisadores da Polônia, França e Áustria - ex-assistentes de M. Kalecki -, o editor de suas obras completas, professores pesquisadores dos Estados Unidos e Grã-Bretanha, bem como do México e do Uruguai, além de professores brasileiros. A participação brasileira é multi-institucional, reunindo professores da Universidade de São Paulo (USP), Universidade de Campinas (UNICAMP), Universidade Estadual Júlio de Mesquita Filho (UNESP), Universidade Federal do Rio de Janeiro (UFRJ), Universidade Federal do Ceará (UFC), Universidade Federal de Uberlândia (UFU) e Escola de Administração de Empresas de São Paulo, da Fundação Getúlio Vargas (EAESP-SP).

Os textos apresentados deverão ser traduzidos para o português e editados posteriormente na forma de livro.

G.C. Harcourt*

1. Introduction

I expect that like most people I shall never cease to be surprised by the perceptions which other people have of who you are, what you have done and why. So when I retired in September 1998 and my fellow editors of, and friends at the *C.J.E.* asked that I write on being nearly 50 years a Keynesian, I reread some essays about my life and work by John Hatch and Colin Rogers (1997), John Hatch and Ray Petrides (1997), Philip Arestis, Gabriel Palma and Malcolm Sawyer (1997a, 1997b) and Sheila Dow (1997). These authors all have differing time periods and views¹ from which to observe me. These are naturally reflected in their observations. Nevertheless, there is a dominant theme in all their accounts, that, as Hatch and Rogers put it (1997, 97), I have "always been a Keynesian economist in the very broadest sense [, that I have always] identified with the elegance of Keynes's economics [and] also with its social purposes". In this article I try to explain the how and why of their evaluation.

2. First introductions to economics and to Keynes

I was not consciously aware of Keynes and his economics until 1950 when I started a four year honours course in economics at the University of Melbourne. Yet I had already done four years of economics as a school boy. The two texts that dominated those schoolboy years were *Supply and Demand* (1922) by H.D. Henderson and *The Social Framework* (1942) by J.R. Hicks. With hindsight, they may be seen as excellent starting points from which to come to Keynes's writings. The first is a very clear exposition of the essentials of the supply and demand approach of Marshall's *Principles* (1890) without Marshall's own ifs and buts and smoke screens. (It is instead shot through

with Henderson's sceptical view of life in general and economics in particular.) Hicks's book provided an illuminating way to learn the essentials of the Keynesian national accounting framework, Keynesian in the sense that the theoretical system of *The General Theory* (1936) was the principal impetus for the systematic development of the national accounting framework in the war and postwar years. When I wrote my first book (*Economic Activity* (1967), written jointly with Peter Karmel and Bob Wallace), I found that being forced to think through the logic of the national accounts (the topic of chapters 2 and 3 of *Economic Activity*) was extremely enlightening, not least because at the time I wrote the first draft (1963), I was also struggling to understand the logic of the system of production interdependence that is the core of Piero Sraffa's *Production of Commodities*, Sraffa (1960), and of the interrelations between these two systems.²

My first explicit introduction to J.M. Keynes was not through *The General Theory* (or even the *Treatise on Money* (1930)) but through the *Tract* (1923) in the first year lectures by Alf ("Sammy") Weller to those students electing to do the honours questions in their exams. Though it was 1950, 27 years on from its publication, I think in retrospect that it was still a stroke of good fortune to start from there. For in the *Tract*, while Keynes was still a resolute quantity theory of money person *à la* Marshall, he was already kicking against the constraints of his teacher's system, especially the long-period character of its propositions and their irrelevance as a guide to monetary policy. Moreover, though he still accepted the real/money dichotomy, he had already singled out deflation as a worse short-term situation of economies than inflation (even hyperinflation) and within this, the social evils of unemployment as opposed to the economic effects of falling price levels. So we took on board the appropriate passages and we were given the basis with which eventually to understand the full significance of the context within which is placed Keynes's best known remark, "*In the long run we are all dead*" Keynes (1923, 65, emphasis in original).³ Furthermore, our fledgling intellectual muscles

were flexed by the detailed analysis of the forward exchanges in chapter 3. It is one of Keynes's most incisive contributions to economic theory; understanding it is a must for understanding his analysis in later years of the implications of an inescapable environment of uncertainty for decisions and decision-makers in an economy.

I did not read *The General Theory* until our second year when it was one of the set texts for the lectures given by Don Cochrane (of Cochrane and Orcutt fame) and Joe Isaac (my first mentor and the first economist to be made a 'judge' of the Australian Arbitration Commission, as it was called then). I tried to read *The General Theory* over the long vacation. Though it excited me tremendously, I cannot pretend that I got very far with it, as my tutors gently pointed out when I came to write my first faltering essays on its concepts. Cochrane did not help by sending me prematurely to Duesenberry's 1949 book when I told him I had read *The General Theory*. By the end of the lectures I think I was becoming clear on the outlines of the theory, helped – I thought at the time – by Paul Samuelson's Keynesian cross diagram.⁴ We did not meet "Mr. Keynes and the 'Classics'", Hicks (1937), until our third year (the first year of the two year honours programme known as Final Division). By then we were also reading *Value and Capital* (1939) and even the *Foundations* (1948). We were introduced to Michal Kalecki's writings on distribution and, in microeconomics, to Robert Triffin's *Monopolistic Competition and General Equilibrium Theory* (1942) following on from the 1933 classics by Joan Robinson and Edward Chamberlin and the reviews and articles they spawned.

The most significant of these articles for me was Kurt Rothschild's 1947 classic, "Price Theory and Oligopoly". The central theme of his article was that oligopolists were as interested in secure profits as in maximum profits and therefore that Clausewitz's *Principles of War* (1943), rather than the theories of Joan Robinson or Chamberlin or the then emerging game theory, was the appropriate framework within which to analyse their behaviour.

When I came to choose a topic for the 30,000 word honours dissertation we were required to do, my two loves came together in an ambitious (one of the examiners thought it over ambitious!) attempt to work out the implications for systemic behaviour in a Keynesian framework of microeconomic foundations containing Rothschild's Clausewitzian oligopolists. The particular issue I honed in on was Keynes's remarks in the chapters on the consumption function, see Keynes (1936, 98-104), on the implications of "financial prudence" – writing off the book values of fixed assets well ahead of their actual wearing out and replacement – for the impact of current investment expenditure on activity. I used Lou Goldberg's wonderful collection of company accounts (Lou was then Professor of Accounting at the University of Melbourne); I tried to test the implications of my attempted marriage against the reserve policy of Australian companies during the Great Depression. I used a case studies approach, taking the accounts of individual companies and constructing flow of funds statements. The results of my labours could most favourably (charitably) be summed up by the Scottish verdict "not proven". I suspect that the essence of what I was getting at is to be found in a pithy paragraph in Joan Robinson's writings, see Joan Robinson (*CEP*, vol III, 1965, 177) and the analysis of this on pp. 210-14 of Harcourt (1972). Oligopolists have some discretionary power over the setting of prices *and* also wish, as far as is possible, to finance their investment expenditures internally from retained profits. If we now consider a world of oligopolists, it follows that the expansionary effects of a rise in overall planned investment may be offset, always to some extent and sometimes more than offset, by the contractionary effects of the accompanying rise in planned savings. The latter results from the redistribution of income implied by the rise in profit margins and prices designed to bring about the required rise in internal finance.

Partly simultaneously with, partly preceding these developments in my thoughts about economic theory, were radical changes, first, in my political beliefs and,

subsequently, in my religious ones. The direct stimulus for the changes was not J.M.K but the first year lectures on economic geography (eat your heart out, Paul Krugman) which constituted, in essence, a course on comparative economic systems. It was a shock to my system for while they revealed great variations in the nature of the organisation of different social systems, they also revealed two common characteristics in all – that injustice and poverty thrived and that the rationality of the different forms of organisation was conspicuous by its absence. The result was my conversion from being a doctrinaire free marketer – my parents' views absorbed uncritically, for details see Harcourt (1998, 3-7) – to, I suppose, an equally doctrinaire socialist (soon and later, respectively, to be coupled with the adjectives, "democratic" and "Christian"). These philosophical changes were given practical content when I joined the Australian Labor Party (ALP) in early 1954.

3. Other influences

I have stressed the influence of Keynes and the writers on price formation in different market structures. But I want also to mention the discussion of Joseph Schumpeter's work on business cycles in my second year in a course on economic history and of the great economists in my third year when I took HET as the first of my honours options. (In my fourth year I took mathematical economics.) The small group taking HET read Smith, Ricardo, Malthus, J.S. Mill, Marx, Jevons, Marshall and others in the originals. I confess that Marx's *Capital* defeated me and I had to depend on Maurice Dobb and Paul Sweezy to give me what few clues I acquired. That did not stop me calling myself a Marxist nor writing an economic history essay on an industrial revolution in the sixteenth century within a Marxist framework. In the essay I foolishly used terms such as exploitation, surplus labour and value, proletariat and capitalist –

much to the annoyance of one of my teachers, a Latvian who was opposed to anything Marxist. Unfortunately he also marked the essay.

I graduated at the beginning of 1954 and spent the next 19 months or so working for a Master's degree by dissertation as the research assistant to R. I. Downing, who had just taken up the prestigious Ritchie Chair at Melbourne University, one of the very few pure research chairs in Australia. Downing, an Australian and a graduate of Melbourne University, was also a Cambridge buff, an enthusiastic Keynesian (he had been at King's just before the second world war) who also knew and admired Kalecki. The project I worked on was financed by the Reserve Bank of Australia (the Central Bank). I had to design and carry out a pilot survey of income and saving in Melbourne, to see whether an annual Australia-wide survey along the lines of Harold Lydall's work in Oxford and George Katona's at Ann Arbor was a practical possibility. This was Keynesian economics in a down-to-earth mode, examining the feasibility of acquiring information at the level of the household on three fundamental variables in the Keynesian system - income, saving, wealth - in order to estimate their aggregate values from the bottom up, as it were.

The project was successfully completed in 1955 (though not without many trials and extreme tribulations, of which I shall say nothing, in print anyway). I subsequently received the degree in 1956. My first article, "Pilot Survey of Personal Savings", written jointly with Duncan Ironmonger (who had been the excellent expert advisor from the ABS on the stratified sampling procedures used to gather the information) was published in the *Economic Record* in 1956. By then I was married to Joan (30 July 1955) and we were in Cambridge. I was doing a Ph.D. at King's, supervised first by Nicky Kaldor and then, when he went on leave for the academical year 1956-57, by Ronald Henderson.⁵

4. At Cambridge in the 1950s

My Ph.D topic was initially on the implications for the theory of the firm and the trade cycle of the assumption that secure profits are as important as maximum profits in oligopolistic market structures. When I told Robin Marris⁶ this at the first meeting of the new/old research students in Michaelmas Term 1955 to set up the seminar series, he pounced – "You're first!". So two weeks or so into the Full Term, I gave a preliminary paper on my topic to the seminar. Joan Robinson was there, chain smoking and startling us all in the subsequent discussion by saying (of business people's behaviour) "I think the buggers do ...". Despite surviving this rather traumatic beginning, I quickly lost my way in the first term, partly because Nicky and I did not hit it off at all.⁷ So being assigned to Henderson at the start of 1956 literally saved my academic life. Henderson had a look at my honours dissertation and sent me to the NIESR to work on a then emerging data set, the preparation of aggregate profit and loss, balance sheet and funds statements for all the quoted public companies in the UK for 1949-53. Bryan Hopkin, the then Director, wanted some reports written on a sample of the data – the chemical industry and the woollen and worsted industry – and its uses. That was my task for the first eight months of 1956. It was hard work – the nearest thing to mechanisation was a Marchand calculator – but invaluable. In addition I came to know the research officers at the NIESR, especially Max Corden, a fellow Australian, Sig Prais and Christopher Dow. Dow took me for a beer on the evening he finished the first draft of his celebrated imported-cost inflation model, Dow (1956), an approach I subsequently was to take in my own research though I cannot pretend that I had then other than the merest inkling of what he had done, due in equal measure to his euphoric account and my response to English pints.

After many ups and downs my topic became the implications of using historical cost accounting procedures for setting prices and measuring incomes for dividend and

taxation purposes in an inflationary period. I put the historical-cost pricing models of Trevor Swan, Eric Russell and Russell Mathews and John Grant into the Marxian-Kaleckian framework of Joan Robinson's *Accumulation of Capital* (1956) to derive my inferences. The inferences were tested against the NIESR data referred to above. My first policy proposals were that the measurement of profits for taxation and dividend purposes should be on a replacement-cost rather than an historical-cost basis, as should the setting of prices by firms. I also started a long-to-continue investigation of the impact of investment-incentive schemes on investment decisions and outcomes.

In 1955 I had gone, usually with Tom Asimakopulos and Keith Frearson, to Joan Robinson's lectures on what was to become *The Accumulation of Capital* (1956). I found them as stimulating as they were frustrating, not least because Joan dropped her voice whenever she came to a critical proposition. So, when the book was published in 1956, I took off a term from "research" (much to Ronald Henderson's displeasure, he had no love for either Joan or her influence), locked myself away with the book and then emerged to read a paper on what I thought it was all about to the research students seminar over two successive meetings. Marris chaired the sessions and Joan came to a third session to answer questions. She was not impressed by us, she thought we could not see the wood for the trees (even those she planted) because we asked nit-picking questions about, e.g., price and real Wicksell effects rather than about broad conceptual issues. Probably she was right, but she was not without blame as she was to admit when in 1962 she published her own tell-it-to-the-children version (just as she had done in 1937 for *The General Theory*).

This detour was an invaluable experience because it gave me a framework and focus for my subsequent work, a framework which obviously I think I understand much better now than when I was first developing it. That is to say, I was starting to work on

mainly classical problems done in the modern post-Keynesian, Kaleckian and Marxian manner. The first fruits were, as I said, to be found in my Ph.D. dissertation. It allowed me to analyse the relationships between pricing practices (in this case, whether historical or replacement costs were marked-up), the level of activity and the aggregate distribution of income in periods of inflation. It also allowed me to link these outcomes back to the temporal structure of the liabilities side of balance sheets through the impact on the need for firms to borrow short-term and long-term because of what was happening to their cash flows.

In retrospect, I see that I put too much emphasis on the allocation of resources aspect of what was going on. I argued that by using replacement costs the price mechanism would be able the better to do its grand (neo-classical) job, signal where resources should move to and from because of the 'true' costs of production involved – clearly a naive inference in a world of oligopolists. Moreover, it distracts attention from the need explicitly to consider what determines the sizes of the mark-ups used (regardless of the cost-base to which they are applied) and so to look at the relationships between accumulation plans, financial needs and price-setting. Because of Keynes's realisation in 1937 that he had neglected the finance motive in his discussion of the determination of the rate of interest, proceeding from *The General Theory* alone meant that readers sometimes missed the significance of the vital distinction between finance, on the one hand, and saving, on the other, and the role that finance, not saving, played as the ultimate constraint on the achievement or not of planned accumulation.⁸ This emphasis was to be found in the later (and earlier) Keynes and in the writings of Kalecki and Hy Minsky. It is part of the modern agendas of both the post-Keynesian and mainstream literature, see the many papers which Asimakopulos (1983) spawned and the huge literature created by Feldstein and Horioka (1980), to which Paul Dalziel and I made a modest critical contribution in the *Cambridge Journal* in 1997. We defended Keynes's

fundamental insight that, as James Meade put it, nationally and internationally, the investment dog wags the saving tail and not the other way around.⁹

5. Cambridge themes in first Adelaide years

In March 1958 I started a lectureship at the University of Adelaide. In 1960 I gave some lectures on Kaldor's postwar writings which resulted in me asking why such an eminent Keynesian as Kaldor *insisted* that full employment was the natural long-period position of a growing capitalist economy, see Harcourt (1963a)? There was a convenient analytical dichotomy which provided a rationale for his view. For if it were true that prices and money-wages were sticky in the short period but flexible in the long period, with prices being the 'more' flexible of the two, the Kahn-Keynes multiplier would serve to determine output and employment in the short period and (providing $s_\pi > s_w$), the distribution of income in the long period. A crucial proviso was that full employment was 'given' by the requirement that accumulation proceeded at a pace which allowed Harrod's g_n to be realised; for then Kaldor's long-period mechanism ensured the equality of g_w with g_n . This was a neat logical solution but why should anyone believe that it described the world, especially when we had the prior contributions of Kalecki in which both employment and the distribution of income were determined simultaneously and in the short period, without there being any constraint to be at full employment.

Because of my earlier work, it was natural for me to ask: what pricing policies must be followed in the consumption and investment goods sectors in order that the Kaldor mechanism works in the short period (by 1957, Kaldor was arguing that his mechanism applied to the short period as well as the long period)? Note that I was old-fashioned enough to believe it necessary to distinguish explicitly between the roles of the two sectors and also to have investment leading and saving following. Moreover, it was also made explicit that the chief decision-makers were business people, that it was their

accumulation, profit-making and employment and output decisions which drove the economy along (sometimes well, sometimes poorly), not those of lifetime utility maximisers whose consumption/saving patterns led and all other institutions were but neo-classical agents devoted to helping them fulfil their plans, as if a Ramsey optimiser ruled the world. I stress these points because if we examine the helpful, if misguided, article by Chari (1998), a Lucas admirer, on Robert Lucas's influence on macroeconomics in the last quarter of a century, we see that the whole Marx-Kalecki-Keynes view has been completely suppressed in most macroeconomic analysis, in Chari's view, a good thing too.¹⁰ If I have not persuaded you, do have a read of an insightful article by John Lodewijks (1999) in which he sets out the core characteristics of the macroeconomic sections of three leading modern texts, Mankiw (1998), Parkin (1996) and Taylor (1995). His account supports my generalisation. God alone knows what harm it has done to the now too many cohorts of undergraduates brought up on this fare. I was relieved to see that Bob Solow takes a broadly similar view on these general matters: see the many wise remarks in his recently published Frederico Caffé Lectures, *Monopolistic Competition and Macroeconomic Theory*, Solow (1998).

Not surprisingly, the answers to my question what pricing policies must be followed in order that planned investment becomes actual investment and full employment is maintained produced some very peculiar behaviour both within and between the consumption goods sector and the investment goods sector. For example, in one scenario, we find that the entrepreneurs in the investment goods sector are active, bidding for or sacking labour, and raising or lowering production in response to changes in planned demands. In contrast, their counterparts in the consumption goods sector are passive, accepting the loss or return of labour and the consequent changes in production. Their only active role is to set the prices of consumption goods appropriate to each situation. There is a glaring weakness in my analysis. I implicitly treated each sector as

one giant firm (the modern representative agent heresy) and so derived sector results. I needed to delve one layer deeper in order to find out the behaviour of individual firms which would give those sector results. Solow (1998) takes on such considerations head on (but it is over 30 years later). Robin Marris also worked on similar themes for many decades; his mature views are to be found in Marris (1991, 1997)).

At much the same time I reviewed Wilfred Salter's 1960 classic, see Harcourt (1962; 1982). I found it one of the most illuminating books I have ever encountered in economics. Not only did Salter solve the puzzle why old machines could operate side by side with new and better ones (old machines only have to cover their *variable* costs, new machines have to expect to cover their *total* costs), he also made serious and profound policy recommendations concerning the rate of change of nominal incomes. In order to have high levels and rates of growth of overall productivity in a fully employed economy, the ground rule for adjusting money incomes should be that they increase at the rate of overall productivity plus prices.

At the time I read Salter's book there was a heated debate occurring in Adelaide (indeed, in Australia) on an appropriate wages policy for Australia. Eric Russell, my mentor at Adelaide, was virtually the odd (but ultimately correct) man out in the debate. With James Meade he had written the definitive account of how the Australian economy works, see Meade and Russell (1957). (I always preferred Russell's Kaleckian means of establishing the paper's main results, see Harcourt (1977a); Sardoní (1992). With Salter, alas to die at the ridiculously early age of 34 in 1963, he had given crucial evidence combining his theoretical analysis with Salter's empirical work, to the Australian Arbitration Commission on behalf of the wage-earners in the 1959 Basic Wage Case. Eric's arguments were opposed by those economists who gave tremendous weight to the 'evils' of inflation and who were not prepared to allow changes in prices to influence the setting of the rate of increase of money incomes. It seemed to me at the time, albeit

through the proverbial glass darkly, that Eric was correct. I am comforted by the fact that my other Australian mentor, Joe Isaac, also agreed with Eric in the debates.

I recently returned to these themes, together with the implications of Kalecki's remarkable 1943 article on the political aspects of full employment, especially his vital distinction between the political economy of *getting* to full employment, on the one hand, and *sustaining* it, on the other, see Harcourt (1997). I argued that if economies followed the Russell/Salter rule of adjusting *money* incomes for effective productivity *plus* prices, they would greatly improve their chances of entering virtuous regimes of Salter processes in which *overall* productivity would grow at agreeable rates because low productivity industries would be knocked out and investment in high productivity industries would be encouraged. This would enhance the chances of restraining increases in nominal incomes, so allowing full employment to be maintained because *real* incomes would be growing at relatively satisfactory rates. These ideas were put by the Australian Council of Trade Unions advocate to the Industrial Relations Commission in the 1996-97 Living Wage case (partly through the good offices of our son, Tim, who was then a research officer at the ACTU). Alas, they did not carry the day with the Commission that year but received a more sympathetic hearing the next year. The current emphasis on the need to create flexible labour markets and to introduce enterprise bargaining threatens to produce a pattern of wage levels and changes in wages which will throttle the benefits of Salter processes by allowing old machines longer lives in declining or low productivity industries and frustrating the rate of introduction of new machines in high productivity or expanding industries, so perpetuating sluggish growth in overall productivity.

While I supported Eric in the discussions at Adelaide and in letters to him when he was on leave in Oxford in 1960, I did not write directly about the issues, except to list Salter's policy conclusions in my 1962 review article. My own writings at the time were on much more basically microeconomic policy proposals – investment allowances for

primary producers (Barton and Harcourt, 1959), a rather silly article with Jim Bennett on reforming the company taxation system (silly because it mixed up a neoclassical with a post-Keynesian approach, Bennett and Harcourt, (1960)) and on theoretical issues – the critique of Kaldor's theories, a note on Joan Robinson's 1956 volume and Harry Johnson's critique of it, Harcourt (1963b) and the first draft of "The Accountant in a Golden Age" (1965a); Sardonì (1992), my second most cited paper after the survey of capital theory in the *Journal of Economic Literature*, Harcourt (1969).

6. Cambridge in the 1960s: an insider's view

In the autumn of 1963 I returned to Cambridge on study leave and almost immediately (the day after President Kennedy was killed) was offered a University Lectureship in the Faculty, soon to be followed by a Fellowship at Trinity Hall. I took leave without pay from Adelaide and stayed until near the end of December 1966. This was possibly the most productive, certainly the most exciting years of my working life. Themes and issues which I had been looking at separately now came together. A major catalyst was hearing Bob Solow's 1963 Marshall Lectures on the Cambridge theories of distribution and growth associated especially with Kaldor and Joan Robinson. These spurred me on to write my own favourite theoretical paper on employment and distribution in a two-sector model in the short period, Harcourt (1965b); Sardonì (1992). It combines a macroeconomic theory of distribution, a Kaleckian/Keynesian theory of employment, a Salterian discussion of the choice of technique, a Kaleckian/Robinsonian approach to price setting, Sraffa's emphasis on production interdependence,¹¹ and an emphasis on retained profits as a source of finance for investment expenditure and as a determinant, together with the level of aggregate demand, of the size of the mark-ups in the two sectors.

The paper made explicit the structure of my approach to understanding the processes at work in modern economies from then on. A major item missing was an explicit role for Keynes's monetary insights and the determination of the rate of interest, always something of a mystery to me. That is one reason why in 1974 when my old teacher, Jim Cairns, who was then Deputy Prime Minister and Federal Treasurer, asked me whether I would consider being Governor of the Reserve Bank of Australia, I said "no", adding "You know me, Jim, I'm a real man, not a money man".

My interest in inflationary situations and Salter's contributions came together when I examined the choice of technique in inflationary conditions, comparing and contrasting the outcomes of different investment-decision rules and, in a subsequent paper, Harcourt (1968), the impact of different investment-incentive schemes on the choice of technique. I also used the analysis of "The Accountant in a Golden Age" to analyse what effects the Russian system of bonus payments for managers, then all the rage, had on the choice of technique in planned economies, see Harcourt (1966). I queried whether the results had an economic rationale or were even what the proponents of the bonus scheme intended. As I have said elsewhere, I see with hindsight, that I was using the post-Keynesian method of starting from real world observations, what people actually do, what economic societies they operate in, rather than an axiomatic one of, say, an assumption of profit-maximisation. The object was to work out the results of business people's behaviour and policy makers' declared aims and to compare the results with those arising from the application of standard economic theory.¹² For example, I showed that with the orders of magnitude likely to be met in the real world, the pay-off period criterion resulted in a more investment-intensive, less labour-intensive technique being chosen than would have occurred if a DCF procedure had been used.

In 1966 I wrote the first draft of "Pricing and the Investment Decision", Harcourt and Kenyon (1976); Sardonì, (1992). In it I tried to develop an endogenous theory of the

size of the mark-up, relating it to investment plans and the desire for internal finance and trying to make sure that the model was set in historical time as Joan Robinson called it (to contrast it with logical time) and which we now include under the rubric of path-dependence.

The paper had a long gestation period, see Harcourt (1995a, 233), and by the time it was published Al Eichner's and Adrian Wood's writings on similar themes had captured centre stage. Both, of course, made splendid contributions but Eichner's model has a weakness associated with the use of Keynes's MEC schedule and Wood's analysis is explicitly in the logical time of a Golden Age model. (Jim Ball (1964) preceded us all.) An implication of our analysis was that, in the oligopolistic industries with which we were concerned, margins would be greater, the greater was the investment planned, *ceteris paribus*. But investment would be less, the higher were the margins and therefore prices set. In microeconomic terms at least, this is a drawback on accumulation, productivity growth and attaining and sustaining full employment. Furthermore, the higher price levels may make the control of inflation more difficult. These arguments may not go through at the level of the system as a whole but, at the least, they need to be explored. Salter processes are at their most effective when competitive market structures are present. The increase in international competitiveness of the last two decades may have brought the world economy closer to the competitive model than when the writings referred to above were first developed. If so, our minds may be put more at ease on this particular score.

7. Capital theory controversies and policy proposals

Soon after I returned home I was asked by Mark Perlman to write a survey article on capital theory for the newly formed *Journal of Economic Literature*, see Harcourt (1999a) for the full story. This made me read intensively the literature, much of which

had been created around me in the 1950s and 1960s by people mainly from the two Cambridges. Especially did it force me to try to make sense of the heated discussions I had witnessed in Cambridge between Joan Robinson, Kaldor and Pasinetti, on the one hand and Solow, Hahn, Meade, Christopher Bliss and others, on the other. Ken Arrow also participated and was respected by both sides, both, for example, claiming learning by doing, Arrow (1962), for themselves. Sraffa mostly stood aside from the day to day skirmishes, though he did ask me to show why Levhari's claim (1965) that reswitching and capital-reversing could not occur in the economy as a whole was wrong when I drew his attention to the article, see Harcourt (1999a). Writing the survey while simultaneously taking an active, time-consuming role in the anti-war movement radically changed my approach to economics, teaching and politics, changes which were to affect the policy debates and proposals with which I was associated in the 1970s.

Once my 1972 book on capital theory was published, I turned to its policy implications and to policy issues in general. The "long boom" or "Golden Age of capitalism" was coming to its end, Australia as with the rest of the advanced world, was experiencing rising inflation and, soon, rising unemployment. Two papers from the first half of the 1970s set out the theoretical background and the social and political philosophies involved. Fittingly, the first paper, Harcourt (1974), arose from a lecture to the South Australian accounting profession, for it has always been my belief that the Australian training of economists, whereby some knowledge of the rationale and procedures of double-entry book-keeping is required, is a *sine qua non* for understanding how capitalism originated, developed and works.

In the lecture, I outlined the ingredients of the package deal of policies that came to be called the Adelaide Plan: so-called, because it was the outcome of discussions between Eric Russell, Barry Hughes, Philip Bentley and myself in Adelaide. In Harcourt (1999b), I summarised its essentials. Sufficient, therefore, to say here is that it was an

attempt to provide a sensible, effective and more just and humane alternative to what we saw to be the misguided attempts to tackle accelerating inflation by short sharp shock procedures; their professed aim was to quickly push unemployment above the then fashionable concept of its natural rate. This was designed to force decision-makers and wage-earners to revise their inflationary expectations and then move slowly back to the natural rate with a lower rate of inflation in mind.

In Harcourt (1977b; 1982) (the paper arose from a seminar I gave in Melbourne in 1975), I compared and contrasted the three rival theories then on offer (and the policies that flowed from them) from policy-makers and academics alike in Australia – Monetarist, Bastard Keynesian and Post-Keynesian. (Mervyn Lewis identified a fourth group, the structuralists, who came at macroeconomic policy from an essentially orthodox microeconomic base, forerunners of Gordon Brown's supply-siders.) When discussing policies I tried explicitly to identify the political constraints on the possibility of acceptance and implementation. I did this also later in the decade in a paper given at a symposium on unemployment at the Winter School of the Economic Society of Australia and New Zealand, Harcourt (1978). There, I wrote: "When putting forward these suggestions, I shall try to operate within the constraints imposed by the present Federal government and *its* advisors, to try to devise a package that is acceptable to *their* philosophy, and to *their* political and economic outlook. I do this, not because I agree with them – they are in the main repugnant to me – but because I find the present level of unemployment so *unnecessarily* wickedly high as to make unthinkable *either* an emasculated Pontius Pilate act *or* the attitude of let them – the pollies, their advisors *and* the unemployed – stew in their own juice, it can only hurry on the time when the whole system may be overturned." (61).

Like much of the rest of the industrialised world, Australia was caught in what the late Arthur Okun (1978) called "The great stagflation swamp". In those years, prices and

money-wages were relatively sticky and so any contractionary fiscal and monetary policies designed to drive inflation out of the system had a seemingly irreducible floor in the USA of about 6 per cent per annum "despite massive excess supplies of idle people, machines and plant", Okun (1998,7), a situation which was prolonged for over three years in the USA.

The Federal government and its advisors seemed not to have learnt from the American experience. Nevertheless, I tried to persuade them to attempt a cautious increase in government expenditure, concentrating on expenditure with a low import content and directed to social purposes. I mentioned the balance of payments constraint but said that if the value of the multiplier was less than two we could probably take it in our stride. If there were to be an accelerator effect, that would be a problem – but with the then level of excess capacity and finance puzzles any lift to investment would be a while coming – by which time I hoped the other measures I outlined would have given Australia a more competitive cost structure.

At that time virtually all governments in Australia were against a rise in government spending and so the second-best policy was a cut in taxes (accompanied by a rise in interest rates). I actually advocated a cut in sales taxes, not only because of the effect on spending but also because of its favourable impact on the rate of inflation. (By the early 1990s I had changed my mind to argue that government spending should be designed according to the longer term needs of the community (subject to the political philosophy of the party in power) and counter-cyclical policy should be through changes in taxes and interest rates, see Harcourt (1993b; 1995b)).

I coupled the macroeconomic proposals with a plea for the return of indexation through the Arbitration Commission. I argued that the relationship between real wages and unemployment in Australia (as a died-in-the-wool Keynesian, I should have written unemployment and real wages) was complicated, certainly not obviously negative, as was

then argued in official circles, and therefore *real* wage cuts were not needed, if they ever were. I also coupled this with an earlier suggestion of a relativities wages fund, whereby the groups who thought they had fallen behind in past years in the wage-wage spiral could argue before the Arbitration Commission for a share in a pre-determined amount granted overall, over and above the indexation procedures, in order to restore relativities. The full restoration might well be spread over a number of periods, but the justice of the claim would have been established from the beginning. Such procedures would require further co-ordination and co-operation – agreement as to what *was* a fair structure of relativities, the target to be aimed at and eventually reached.¹³ I concluded by saying that my suggestions for Australia were in accord with the suggestions made overseas by the best Keynesians, Bastards and otherwise – I cited Jim Tobin and Sid Weintraub. I closed by saying that "If we were not operating within the political constraints imposed by the present government, I would repeat again the need for what Joan Robinson calls ' a real social contract which would satisfy the reasonable demands of the workers for more control over their own work, more security against redundancy, better social services and so forth;, but that [I feared], must await our return to another [better] world" (69).¹⁴

In the late 1970s the ALP set up a National Committee of Inquiry into why the party had done so badly in the 1975 and 1977 elections and I was appointed as the economist on the committee. This allowed me to feed in these and other ideas into the discussion paper on economic policy and the future of Australia which we produced, Discussion Paper no. 6, (1979). I drew on a paper I wrote with Prue Kerr, Harcourt and Kerr (1979), and a review of Hy Minsky's 1975 book on Keynes, Harcourt (1977c).

I would like to think that the combination of explicit theory and policies within a judgement of what was politically feasible in a given situation and specific period of time would have had Keynes's blessing for it was his own practice that, at least implicitly, I had in mind. Certainly, the most important ingredient of the package deal of policies of

the Hawke-Keating governments in the 1980s and early 1990s – the Accord – may find its rationale in these arguments. Of course, I do not claim any originality for them – Ralph Willis, a lone voice crying in the ALP wilderness for many years, was making the same arguments and I was merely making explicit what I had learnt from Russell, Salter, my Cambridge mentors and Kalecki, together with my maturing understanding of Marx's analysis of capitalism.

At the same time as Tommy Balogh and Nicky Kaldor in the United Kingdom were identifying Monetarism as the incomes policy of Karl Marx, I was scandalising the increasingly technocratic and value free economics profession in Australia by talking explicitly about these attempts to recreate the reserve army of labour. The objectives were to make the sack effective again, to produce a cowed and acquiescent work force for international and domestic capital to exploit, and to reverse the swing of economic, social and political power to labour which had occurred over the Golden Age back to capital, disguised as a laudable attempt to control inflation. I publicly attacked as hired prize-fighters those economists who were supporting the monetarist/Bastard Keynesian measures designed to bring all this about. In retrospect, I bitterly regret not "spilling the beans" on a secret meeting I attended at the University of Melbourne sometime in the 1970s at which Heinz Arndt argued that the economics profession had a duty to wean the public off the acceptance of full employment, as it was then understood anyway, as an indispensable object of policy. Of the ten or so Australian Professors of Economics there, only one other was as scandalised by the argument as I was, see Harcourt (1995b, 31).

8. Return to Cambridge in the 1980s

In 1975 I chaired a small IEA conference at S'Agaro on the microeconomic foundations of macroeconomics. Its theme was, of course, the principal theoretical theme

with which I had been grappling since the early 1950s. The volume of the conference, Harcourt (1977d), was not well received either by its reviewers or the true initiator of the conference, John Hicks, who was distressed by our inability to come up with definitive or at least suggestive solutions to the issues we raised. Nevertheless, I think we acknowledged the difficulties I documented in the introduction to the volume and made some progress towards understanding their source.

In February 1977 Eric Russell died after playing squash. While I had felt torn up by the roots when I left Cambridge at the end of 1966, I nevertheless wanted to stay in Adelaide while Eric was there. Moreover, in 1972 my mother had had a severe stroke and we did not feel justified in leaving Australia while she was alive. But when she died in 1981 and openings occurred in the Faculty and at Jesus, I decided with the selfless support of my family to take them up. The major task I set myself was to write the intellectual history of Joan Robinson and her circle – Austin Robinson, Richard Kahn, Piero Sraffa, Nicky Kaldor, Michal Kalecki, Dick Goodwin, Luigi Pasinetti. I wanted to see whether there was a coherence to the tradition this group of economists both inherited from the classical political economists, Marx and Keynes and passed on, adding, of course, their own very considerable contributions. Virtually all of the group are now dead and since I nearly joined them four times between September 1992 and September 1994 I am rather lagging in getting it all down in book form. But there are now well over 30 separate essays which provide an essential background to the project and now I am retired I hope to get into King's Archives more often to examine the papers of these economists, most of which are housed there. Prue Kerr and I have just started collecting the critical articles on Joan Robinson's contributions for a series of readings which Routledge publishes. Reading these and writing the introduction to the volumes should be a great help in focussing my mind on the other project. I believe it to be a vital project, necessary in order to help to salvage the wisdom contained in the writings of

Keynes, his immediate colleagues and their followers, and Kalecki and his, together with the other strands that fall under the rubric of post-Keynesianism.

I have supplemented this principal project in two ways: First, with Peter Riach who suggested to me that we organise the writing of "*A 'Second Edition' of The General Theory*" by Keynes scholars from all over the world, Harcourt and Riach (1997, 2 vols). Of course, the title may be jokey and pretentious, but the intent was serious. We wanted, first, to document as well as could be done what Keynes himself might have written in, say, 1938 or 1939 on certain aspects of *The General Theory*, had he not been so ill from 1937 on. Secondly, we asked the scholars concerned to explain what and why they had done on certain aspects of *The General Theory* (and extensions under the Keynesian umbrella) in the postwar period. Together, this would serve to provide up-to-date reports within an historical perspective at, I believe, a peculiarly significant and appropriate juncture in the development of economics itself and, more importantly, the particular economic problems of much of the world. These were (are) sensible aims, explicitly stated, but, I have to say, wilfully overlooked in two savage reviews of the volumes. If Freudian ideas were still in vogue I would hazard an explanation of the rationale for the reviews. But as they are not, I won't. Moreover, other reviews have been positive and favourable, indeed generous. For example, Tony Thirlwall (1999) has written a veritable *tour de force*, writing most convincingly as John Maynard Keynes reflecting on and reacting to the various themes in the volumes.¹⁵

Secondly, following the request to give the Second Donald Horne address in February 1992 I have written a series of policy papers, Harcourt (1992, 1993a, 1993b, 1994, 1997), which have pulled together the strands of my previous incursions into policy and added new ones in a way which, I hope, is up-to-date, properly relevant and infused with the spirit of the economics of Keynes – and his contemporaries and followers.

The idea of the Horne Addresses is to ask an Australian living abroad to come home to give a wide-ranging address on issues of vital importance for Australian citizens. The conjunction of events to which mine was addressed with the launching of the Republican movement in Australia and the U-turn on economic policy of the Federal ALP government that was then occurring. The background was the emerging reaction against the 'let the market rip' policies of the 1980s which characterised part of economic policy in Australia, and the crowing over, and then second thoughts about, the implications of the collapse of Communism. I never held any brief for the awful regimes of the USSR and the Eastern European economies but I did point out that the achievements of those Western industrialised capitalist economies that had gone overboard on Hayekian/Friedmanite policies from the 1970s on were not that much to write home about either. There was therefore a case to be made for middle ways – the Kaleckian approach to democratic socialism, for example, for Eastern Europe, the Keynes/Kaleckian (with modern additions) post-Keynesian blueprints for Australia and other similar countries.

I preceded my outlines of middle ways with an account of what modern (and not so modern) theory had to say about the conditions which need to be satisfied for markets to be safely left to do their thing, pointing out that these conditions are spectacularly *not* satisfied in the markets for labour, foreign exchange, financial assets and housing. I recognised that it was a *non sequitur* to jump to the proposition that some form of intervention and regulation would necessarily do better – the case for this had always to be made.

The common theme connecting these papers was the argument that many markets and indeed economic systems themselves are characterised by cumulative causation processes. This viewpoint implies that very different policy proposals and institutions are needed than those associated with the more orthodox view that there are strong

equilibrating forces present. Radically different attitudes would be taken towards, for example, speculators and speculation because their systemic effects would not be the benign ones identified by, for example, Milton Friedman in his well-known article on the case for flexible exchange rates (1953).

The essays on macroeconomic policy in the collection relate principally to the problems of small open economies. It allowed me to ride some hobby horses, for example, as I mentioned above, (see p19), that government expenditure should not principally be used for pump-priming but rather should fit in with the longer-term needs of economies, taking into account the social and political philosophy of the government in power. I also drew attention to the danger of forgetting those old-fashioned but profound lessons from the writings of Russell and Salter concerning the macroeconomic effects of incomes policies on rates of accumulation, and from Kalecki concerning the vital differences between getting to, and then sustaining, full employment. Because at the economy level capital and labour are complements, changing money incomes according to changes in the cost of living *and* effective productivity is not only equitable, it is also efficient. It encourages investment in profitable, productivity-enhancing industries and hastens the decline of industries whose time has not only come but gone.

In Harcourt (1994, which was titled "A 'modest proposal' for taming the speculators and putting the world on course to prosperity") I tried to set out the problems of the various broad regions of the world, show how they are interrelated and what particular combination of policies and institutions might serve to tackle their problems effectively and simultaneously. I included various 'carrot and stick' measures to induce speculators to behave in ways which were less systemically harmful. My proposal for inducing less speculation on foreign exchange markets was in a sense a generalisation of the Tobin tax (without, I must confess, me having read Tobin's proposal). I suggested that the taxation authorities identify what proportions of foreign exchange transactions of

both buyers and sellers could be regarded as speculation and that these proportions carry with them penal rates of taxation on the incomes of the transactors concerned. I resurrected Keynes's suggestion (1936,160) that there be an inverse relationship between the levels of tax rates and the lengths of time for which shares were held. I argued that unless housing purchases and sales could be shown to be for legitimate social purposes, penal rates of taxation should go with them. There is a Utopian tinge to such an exercise (though I did try to take into account the constraints imposed by present political and ideological climates). Nevertheless, unless such interrelationships and schemes are explicitly set out, it is difficult to get people of good will to think about the causes and cures of the world's ills.

9. Conclusion

So: here it is, nearly 50 years a Keynesian, still pottering on and thinking about the themes which excited me so much when I started economics at the University of Melbourne in 1950. I am glad that I have been able to write accounts of many of the leading actors in the drama I have witnessed and documented in places of lasting public record, see, for example, Harcourt (1993c, 1995b), Baranzini and Harcourt (1993), Pesaran and Harcourt (1999). But, ultimately, it has been the policy aspects of what I have tried to do that I care most about. I am not sure that I really want to be an economic dentist – one actual dentist in the family is enough, I would have thought – but I would like to do my damndest to make sure that those least able to protect themselves from the malfunctioning, natural and also now, more often man-made, of modern societies are in fact protected. That for me, as I believe it was for Keynes and his followers, is the proper rationale for our "miserable subject".

* Jesus College, Cambridge. I thank but in no way implicate Stephanie Blackenburg, Giuseppe Fontana, Tim Harcourt, John Hatch, Prue Kerr, Bob Rowthorn and Trevor Stegman for their comments on a draft of this article.

¹ John Hatch and I go back to the 1960s when he was a research student and I was a young don at Cambridge. Subsequently we were to be colleagues for many years in Adelaide. I first met Colin Rogers in the 1980s. When he decided to leave his native South Africa and settle in Australia, he came to Adelaide to the post that became vacant when, having left for Cambridge in 1982, I resigned in 1985. I had known Ray Petrides from the 1970s, both in Australia and on his frequent visits to Cambridge. Philip Arestis, Gabriel Palma and Malcolm Sawyer came to know me well personally when I returned to Cambridge in 1982. I first met Sheila Dow in 1980 but we had corresponded before that.

² A précis of the insights so gained is in paras. 12 and 13 of Harcourt and Massaro (1964a; 1982, 178-9).

³ "But this *long run* is a misleading guide to current affairs Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again." Keynes (1923, 65, emphasis in original).

⁴ We were also referred to Lorie Tarshis's marvellous text book (1947), but I was too dumb to see that it was the better basis for a proper understanding of the economics of Keynes. I also read Harrod's *Life* (1951) which is often more his than Keynes's.

⁵ Henderson subsequently went to Australia to set up an Australian equivalent of the DAE/NIESR at Melbourne University. I first met him in 1957 when he was a "small l" liberal aligned with the isolated minority around Dennis Robertson in the Cambridge Faculty (and the much respected Treasurer and Fellow of Corpus). He was on leave from

Cambridge at Melbourne and we shared a room. Downing suggested that I try out my questionnaire for the pilot survey on Henderson as he had a most complicated income and wealth situation. He agreed, the questionnaire 'worked' – but he told me that had I or one of the other interviewers knocked on his door because he had been chosen in our sample, he would have refused to answer on grounds of invasion of privacy. I tell this anecdote because Ronald was to become famous for his pioneering enquiry into poverty in Australia which required much more intrusive questions than those of my questionnaire. He also became an early proponent of an incomes policy, including the indexation of money-wages, to complement monetary and fiscal policies in Australia – a very changed (for the better) set of principles.

⁶ Marris helped Piero Sraffa run the research students seminar and generally offer pastoral and other advice.

⁷ This was to be a temporary, not a permanent state, see Harcourt (1988) for my appreciative evaluation of Nicky.

⁸ Trevor Stegman (2.6.1999) writes that I should add "in an economy operating below full employment". There are vital differences between the two situations, in that more saving – not spending – would be required in the full employment situation, but planned additional investment would still need to be financed before it could become actual investment.

⁹ Of course, inflation proved disobliging by "going away" for several years after I submitted my dissertation. In the 1970s I appeared before Russell Mathew's committee on taxation reforms in Australia and replacement cost accounting. (Russell and John Grant were the Australian pioneers on these issues). In response to questions from Russell, I said: "The trouble with you and me being so far ahead of our time is that when our time comes, I at any rate have forgotten what I said."

¹⁰ In my view Lucas should get credit for independently rediscovering the essence of Keynes's critique of Tinbergen's 1930s empirical work on the investment function, renaming it the Lucas critique – otherwise, I think his influence has been disastrous.

¹¹ At this time Vincent Massaro and I were reading Sraffa's 1960 book and discussing his sub-systems with him prior to writing our two papers (1964a, 1964b) on it.

¹² Many of these ideas went into my lectures at Cambridge as well as the chapters of *Economic Activity* which was then nearing completion. I also used the latter for the course on macroeconomics I gave to British civil servants at the Civil Service training centre near London Zoo. Roger Opie gave the microeconomics lectures, so there are several cohorts of British civil servants who were first introduced to economics by two dinky-di Australian Keynesian economists. I understand there was a file in the UK Treasury on my investment-incentive writings; I hope it was more benign than the one which was soon to be started by the Australian spooks when having returned home in early 1967, I became one of the leaders of the anti-Vietnam war movement in South Australia.

¹³ Tim Harcourt e-mails (30.6.1999) that something similar to this was actually brought in by Bill Kelty (the General Secretary of the ACTU) during the Accord years, showing that "the Australian system provided the institutional flexibility to deliver such measures."

¹⁴ I had started the paper by saying I was going to be "very old-fashioned" in it. I look now as if I had just come out of the Ark.

¹⁵ Tony also gave me an earlier opportunity to help keep the Keynesian tradition alive by asking me to chair the sixth and centennial Keynes seminar at the University of Kent in 1983, on Keynes and his contemporaries, see Harcourt (1985).

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Demanda Efetiva, Investimento e Dinâmica: a Atualidade de Kalecki para a Teoria Macroeconômica

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Resumo:

A teoria macroeconômica atual, cada vez mais restrita aos cânones do *mainstream* neoclássico, afastou-se inteiramente nas últimas décadas de suas origens keynesianas e kaleckianas, substituindo a demanda efetiva pela macroeconomia da oferta; o investimento pela poupança; e – no que se interessava sobretudo a Kalecki – a dinâmica pelo equilíbrio estático. O artigo discute a importância crucial da retomada da contribuição de Kalecki a respeito desses três tópicos para a reconstrução de uma teoria macroeconômica relevante do capitalismo: (i) capaz de explicar, com base no princípio da demanda efetiva, as relações básicas de determinação causal das variáveis econômicas sem referência apriorística e desnecessária a posições de equilíbrio; (ii) que, assim, supere o falso papel de destaque atribuído à poupança, inclusive no crescimento econômico; e (iii) que recupere a dinâmica macroeconômica, de um papel quando muito coadjuvante, para o centro da análise do funcionamento da economia capitalista, que – é preciso insistir – é dinâmico em sua essência.

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1. Introdução

A contribuição de Kalecki à teoria econômica não se restringe à Macroeconomia, mas é certamente nesta que alcança sua mais alta expressão. O objetivo deste artigo é rever três questões teóricas de Macroeconomia – mas com grande impacto em política econômica – em que suas intervenções foram mais notáveis, e que por sua radicalidade e originalidade têm interesse duradouro.

A primeira questão - inclusive do ponto de vista lógico – a ser tratada, na seção seguinte, é a formulação do princípio da demanda efetiva. Em sua obra principal¹ Kalecki faz uma formulação lapidar deste princípio (curiosamente sem explicitá-lo), mais simples e geral do que a de Keynes, que ressalta especialmente a relação unívoca de causalidade gasto-renda, dispensando com lógica cristalina as noções habituais de equilíbrio tão caras aos economistas das mais diversas formações. Ao ser expulsa do paraíso das relações econômicas elementares da Macroeconomia (e não só desta, a rigor), a noção de equilíbrio pode desaparecer sem retorno e sem deixar vestígio.

A seção seguinte trata de um velho tema, tão polêmico quanto crucial para a análise macroeconômica, especialmente nas versões keynesianas heterodoxas: a relação poupança-investimento. Mais uma vez Kalecki nos brinda, no mesmo capítulo, com uma demonstração óbvia – essencialmente idêntica à de Keynes, só que mais simples e direta – de como o investimento (entre outras variáveis, no caso geral) determina uma poupança necessariamente igual e simultânea, que representa a liberação de recursos líquidos de igual montante. Assim a poupança, estando condenada a ser igual ao investimento, não tem nenhuma importância econômica, ao contrário da opinião prevalecente até hoje no senso comum dos economistas, inclusive muitos dos que se dizem keynesianos.

A quarta seção conclui com uma revisão geral e sucinta de como Kalecki vê a dinâmica da economia capitalista como um aspecto central do seu funcionamento, especialmente no que se refere à instabilidade e às flutuações do nível de atividade. Sua teoria do ciclo econômico não esgota o tema da dinâmica (nem tem essa intenção), mas tem o mérito de apontar, de forma analiticamente robusta, para um resultado teoricamente radical: a economia capitalista, operando em condições de rotina econômica e estrutura estável, *não* tende para algum estado estacionário e/ou de equilíbrio geral, mas para *flutuações* (ou seja, é dinamicamente instável); e que o crescimento a longo prazo, qualquer que seja a sua trajetória temporal, depende crucialmente de fatores autônomos de demanda (basicamente, investimento autônomo).

¹ KALECKI (1954), cap. 3.

2. Demanda efetiva, causalidade e equilíbrio.

A percepção de que o princípio da demanda efetiva (P.D.E.) é mesmo um “princípio”, obrigatoriamente anterior à formulação de teorias macroeconômicas, tanto por sua generalidade (de uma “anti-lei de Say”) quanto por sua essencialidade (estabelece as relações básicas de determinação da Macroeconomia), esteve presente em Keynes² e em Kalecki³. Mas em Keynes ele é em boa medida obscurecido pela dificuldade do autor em expô-lo claramente num contexto em que pretende, paradoxalmente, enfatizar a determinação *ex ante* da produção e do emprego⁴. Já em Kalecki, para o qual o nível de emprego permanecia apenas subjacente, como uma decorrência implícita da validação de um certo volume de produção pelas vendas (demanda), o foco puro e exclusivo no resultado *ex post* permitiu tornar mais claro o essencial - que o P.D.E.⁵ consiste na *determinação unilateral* das receitas (rendas) pelo gasto; em outras palavras, na constatação de que nas transações mercantis a única decisão autônoma é a de *gastar* (comprar, converter dinheiro em mercadoria)⁶.

De fato, é esse o *insight* notável de Kalecki no famoso trecho, logo no início deste capítulo, em que, frente à igualdade contábil entre os lucros brutos e o gasto capitalista em investimento e consumo⁷, se pergunta pelo significado da equação – isto é, pelo *sentido* de sua *determinação*, se dos lucros para o gasto ou vice-versa. E conclui, ao inverso do senso comum, que ela se dá do gasto para o rendimento (no caso, os lucros) – porque os capitalistas *não* podem decidir alterar o que *ganham*, mas só podem decidir o que *gastam* (em investimento ou consumo); logo, é a soma dos seus gastos que determina sua renda, e não o contrário.

É admirável a lucidez expressa na idéia mesma de *formular* essa questão, quanto à possibilidade de determinação *causal unilateral* numa simples igualdade contábil, que a um economista comum despertaria, no máximo, a desconfiança de que alguma relação de “equilíbrio” poderia estar subjacente. Entretanto, o notório laconismo de Kalecki pode ter sido aqui contraproducente, ao deixar de explicitar ou aprofundar implicações teóricas de uma proposição ao mesmo tempo tão fundamental e tão surpreendente. A habitual resistência a idéias novas, que Keynes tanto lamentou em contexto semelhante, tende a rejeitar esse tipo de formulação, ainda que não explicitamente, como sendo idiossincrática ou parcial, excessivamente fora dos cânones de uma ciência que se pretende séria – o que infelizmente, para a grande maioria dos economistas, se identifica com o uso sistemático e compulsivo da noção de equilíbrio.

Seria uma perda inestimável deixar de fazer algum esforço de aprofundamento e generalização de uma idéia tão rica, até para que seu real alcance fique mais claro. Fiz nesse sentido, há muito tempo, uma tentativa de sistematizar a versão de Kalecki do P.D.E. num

² KEYNES (1936), cap. 3.

³ KALECKI (1954), *ibidem*.

⁴ Essa ênfase é perfeitamente justificável dadas as preocupações do autor com o nível de emprego, que é determinado *ex ante*; o problemático é só a falta de clareza resultante, uma vez que está tratando aí de *demanda efetiva*.

⁵ Em nenhum momento explicitado pelo autor.

⁶ Ver a respeito POSSAS (1987), pp. 50 ss.

⁷ Abstraindo o gasto público e o saldo da balança comercial, e sob a hipótese simplificadora de que os trabalhadores “não poupam” – isto é, sua propensão a consumir é igual a um: KALECKI (1954), *ibidem*, p. 46.

contexto que me parece o mais simples e geral em que pode ser formulado, de modo a explicitar mais claramente as condições lógicas e teóricas que são *estritamente necessárias e suficientes* para a sua validade⁸. Em síntese, despindo esta proposição básica de causalidade unilateral do gasto para a renda de suas roupagens teóricas particulares – o tipo e o nível de agregação, os componentes *ex ante* dos rendimentos, o conceito de valor adicionado, a explicitação ou não da distribuição de renda, e tantas outras opções, relevantes no seu próprio contexto, mas que nada têm a acrescentar ao P.D.E. em si -, pode-se chegar ao essencial do princípio. Este pode então ser redefinido num nível de generalidade que o torna compatível com as mais variadas especificações teóricas, e por isso mesmo em certa medida “pré-teórico”: uma espécie de “anti-lei de Say”, tão básico e geral quanto seria esta lei se fosse verdadeira; apenas não é axiomático porque é um teorema, isto é, uma proposição teórica demonstrável.

A formulação mais simples é a seguinte: numa dada economia mercantil – e *portanto* monetária, onde o dinheiro cumpre todas as suas funções (meio de circulação, unidade de conta, meio de pagamento) –, em toda transação de compra e venda existe apenas *uma decisão autônoma*: a de *gastar*. Em conseqüência, todo gasto *determina* uma receita de igual magnitude. Por agregação, o total do gasto num dado período contábil é sempre igual e determina o total da receita.

A simplicidade extrema, num tema controvertido, precisa ser explicada. Cabem assim algumas observações sobre essa formulação, todas no sentido de assinalar o que *não* é necessário para a proposição do P.D.E.:

(i) *Não* é preciso supor uma *economia capitalista* plenamente constituída e desenvolvida (com a presença de capital, lucros e trabalho assalariado), mas somente uma *economia mercantil* “simples”, com a condição básica de que ela seja *monetária*, isto é, não seja de escambo - o que é claramente uma condição geral aplicável a uma economia mercantil⁹. Em conseqüência, supõe-se que o dinheiro tenha todas as funções que lhe são inerentes, exceto a função tipicamente capitalista de um ativo (no caso, a moeda) por meio do qual o dinheiro possa tornar-se capital. A implicação da presença do dinheiro numa economia mercantil é que, de acordo com Marx, ele é um intermediário *obrigatório* de todas as trocas, e por isso se torna, não mais um meio apenas, mas um *fim* para cada produtor individual que se defronta obrigatoriamente com o mercado - sem o que uma sociedade baseada na divisão social do trabalho não poderia se reproduzir¹⁰. Logo, existe uma *assimetria* entre dinheiro e mercadoria, e portanto entre o *gasto* (compra) e a *receita* (venda), segundo a qual *só o gasto*, que pressupõe a posse de poder de compra universal – a *finalidade* de todo o processo de troca -, pode resultar de uma decisão efetivamente *autônoma*, na medida em que *dispõe livremente* desse poder de compra. Claro que essas propriedades estão presentes no capitalismo, que é a forma mais desenvolvida de economia mercantil, pelo que o P.D.E. *a fortiori* será válido numa economia capitalista.

⁸ POSSAS (1987), *ibidem*.

⁹ Basta lembrar a respeito as opiniões de Marx e de Keynes. Marx, em particular, mostrou cabalmente n'O Capital como uma economia mercantil se transforma por necessidade lógica (e não só histórica) numa economia *monetária*. Keynes fez algo semelhante, com escopo mais limitado e em textos póstumos.

¹⁰ Essa economia é regida, como propunha Marx, pela forma simples da circulação de mercadorias M-D-M, na qual o dinheiro *já é necessariamente* um intermediário nas trocas – *ainda que* estas visem em última análise ao consumo (produtivo ou não) das mercadorias transacionadas, e não, como no capitalismo já desenvolvido, à valorização do capital, expresso por Marx na forma capitalista de circulação D-M-D', onde $D' > D$.

(ii) *Não* é preciso formular o P.D.E. em termos agregados, nem ele implica algum conceito estritamente macroeconômico; de fato, a formulação acima é a mais “microeconômica” possível, ao nível de cada transação individual. O resultado agregado é um mero *corolário*: dado que em cada operação de compra e venda o gasto determina a receita, durante um período de tempo contábil arbitrário o *total de gastos* sempre será *igual e determinará o total da receita*.

(iii) *Não* é preciso formular o P.D.E. em termos de valor adicionado ou *renda*: a relação de causalidade se estabelece num nível mais genérico, a partir da assimetria entre dinheiro e mercadoria, e portanto entre gasto e receita. A referência usual à renda decorre do hábito adquirido na Macroeconomia, pelo menos desde Keynes¹¹ e também adotado por Kalecki, de trabalhar por conveniência com agregados expressos em termos de renda ou valor adicionado para evitar eventual dupla contagem ou minimizar as dificuldades de mensuração não-ambígua de agregados quando expressos em termos de valor da produção. Da mesma forma, é simples questão de conveniência analítica tratar o produto agregado em termos de componentes de produto setorial de bens finais – consumo e investimento em Keynes, investimento e consumo desmembrado entre capitalistas e trabalhadores em Kalecki. O “gasto” que “determina a renda” não é só em bens finais!

(iv) *Não* é preciso relacionar o P.D.E. – e em consequência a refutação da lei de Say - com a função consumo, e em particular com a suposição de Keynes de uma propensão marginal a consumir menor que um¹². A existência mesma de uma função consumo da renda é inteiramente irrelevante para a validade do P.D.E.. Quem é (ou não) gasto não é a *renda* (um *fluxo*) - cuja *única* relação necessária com o gasto é a de ser *determinada* por ele¹³; mas o *poder de compra* (um *estoque*), que pode ser mais ou menos influenciado pela renda prévia (dependendo principalmente do nível de riqueza de cada agente considerado), mas certamente pode ser afetado por diversas outras variáveis, especialmente o *crédito*. Nesse sentido, e de um ponto de vista puramente lógico, *todo gasto é autônomo* em relação à renda prévia – inclusive o consumo. A hipótese de uma função consumo estrita da renda, hoje mais discutível do que nunca, é uma questão empírica, irrelevante para a validade do P.D.E. e para a invalidade da lei de Say.

(v) *Não* é preciso invocar a ocorrência de “entesouramento”, no jargão clássico e marxista, ou de “preferência por liquidez”, na terminologia keynesiana, ou qualquer outro tipo de “vazamento” monetário de renda entre um dado rendimento e o gasto subsequente, para validar o P.D.E. e invalidar a lei de Say - e isto *exatamente* pelas mesmas razões que acabam de ser apontadas. A *autonomia* essencial de todo e qualquer gasto (e não só o consumo) em relação à renda prévia, devido à possibilidade em princípio de se gastar indeterminadamente *mais* ou *menos* do que ela num dado período seguinte – já que, vale repetir, gasta-se não “a renda”, mas *a partir* de um dado *poder de compra*, que possui relação parcial e indireta com a renda -, torna *irrelevante* a tradicional questão, hoje em desuso, de “quanto” de uma renda prévia é ou não gasto; assim como a questão correlata de que seria a presença do dinheiro como intermediário obrigatório das trocas numa economia mercantil que permitiria afirmar a supremacia do P.D.E. sobre a lei de Say.

¹¹ Ver KEYNES (1936), cap. 3, p. 24, nota 2.

¹² Ao contrário do que supunha HANSEN (1953), cap. 1.

¹³ Instantaneamente se definidos numa transação isolada, num período de tempo contábil quando agregados.

É verdade que a presença do dinheiro, como mostrou Marx, é suficiente para rejeitar a lei de Say¹⁴, e assim mostrar a possibilidade teórica das crises, já mesmo no âmbito de uma economia mercantil simples. Também é verdade, como se viu, que ela é essencial à demonstração do P.D.E.; *mas não isoladamente*, senão *juntamente* com os demais elementos constitutivos de uma economia mercantil, notadamente a divisão social do trabalho e a ausência de coordenação consciente do processo de troca (que Marx denominou “anarquia da produção”). Seria portanto um erro considerá-la de algum modo *a* responsável isolada pelas crises, pelo desemprego, etc.; foi este erro teórico que levou a uma longa tradição de identificação incorreta do P.D.E. com o suposto “problema” da “insuficiência da demanda efetiva” no campo heterodoxo, de marxistas a keynesianos de esquerda. O P.D.E. não tem qualquer “viés de baixa” intrínseco; a renda e o emprego serão sempre derivados da demanda efetiva, e portanto daquilo que os agentes decidirem autonomamente gastar, a partir de suas expectativas.

(vi) Finalmente, *não* é preciso – mais até, seria *altamente enganoso* – expressar o P.D.E. em termos de *equilíbrio*, seja entre oferta e demanda (agregadas ou não), seja entre produto e renda, seja entre investimento e poupança, seja mesmo em termos de “equilíbrio dos consumidores” (ao supor que estejam operando sobre uma dada função consumo, e com isso por exemplo maximizando alguma função utilidade intertemporal). Uma das propriedades que conferem maior robustez ao P.D.E. é que ele *independe* de qualquer hipótese de *equilíbrio*, seja de que tipo for, sendo até mesmo compatível com qualquer padrão de racionalidade que se queira adotar – incluindo comportamentos irracionais!¹⁵ Tudo o que importa é que o *gasto realizado* – por qualquer motivo - *determinará* a renda, e por extensão (numa sucessão temporal de períodos curtos, de que Keynes trata mas não Kalecki) o nível de atividade, inclusive o emprego, de uma economia.

Não é possível exagerar a importância dessa última conclusão. Em termos mais gerais e abstratos, o que se está sublinhando, principalmente a partir do *insight* de Kalecki em sua forma peculiar de exprimir o P.D.E., é que o equilíbrio *não* é um conceito *necessário* do ponto de vista da *determinação teórica* das variáveis em Macroeconomia¹⁶, ainda que pudesse ter algum outro sentido (no que não acredito). Elas têm sua *determinação* básica, incluindo a dimensão *quantitativa*, estabelecida a partir de uma relação *causal unilateral*, do gasto para a renda, quaisquer que sejam o nível de agregação e o recorte setorial e de renda adotados. As equações básicas da Macroeconomia de Kalecki – assim como, em certa medida, de Keynes – são relações contábeis *acrescidas* implicitamente de uma *determinação unilateral* do dispêndio/produto para os rendimentos. Assim, por exemplo, a renda nacional (Y), decomposta por Kalecki em lucros brutos (P) e salários (W),

$$Y = P + W \quad (1),$$

é vista, no caso geral (incluindo governo e setor externo), como igual por definição contábil, *mas também determinada*, pelos gastos associados aos diversos componentes do produto, como indicado pela seta na equação abaixo:

¹⁴ Embora não seja, ao contrário do que pretendem alguns autores marxistas, uma demonstração *avant la lettre* do P.D.E.. Este último *inverte* a causalidade da lei de Say, sendo portanto mais que uma refutação desta. É demonstrando não apenas que a lei de Say está errada, mas que *o seu contrário é verdadeiro*, que ele se torna – repetindo a expressão anterior – uma “anti-lei de Say”.

¹⁵ Ainda que esses possam ou devam não ser considerados relevantes para a análise econômica.

¹⁶ Tampouco em Microeconomia; mas deixemos de lado esse aspecto.

$$Y \stackrel{\sigma}{=} I + C_k + C_w + G + (X - M) \quad (2),$$

em que, como é usual, Y é a renda, I o investimento, C_w o consumo dos assalariados, C_k o consumo dos capitalistas (ou a partir dos lucros), $(X - M)$ o saldo do comércio exterior entre exportações (X) e importações (M) de bens e serviços, e G o gasto público.

No caso simplificado, em que Kalecki abstrai governo e setor externo, a equação anterior se reduz a:

$$Y \stackrel{\sigma}{=} I + C_k + C_w \quad (3)$$

que, juntamente com (1) e ainda supondo que a propensão a consumir dos trabalhadores é igual a um (ou seja, $C_w = W$), resulta na já referida equação dos lucros, com a mesma causalidade unidirecional dos gastos capitalistas para a sua renda:

$$P \stackrel{\sigma}{=} I + C_k \quad (4).$$

**

Com o descarte da noção de equilíbrio e o estabelecimento de um tipo de relação de determinação distinto, creio que se podem identificar claramente benefícios tanto “afirmativos” quanto “restritivos” da introdução do P.D.E. nessa forma e nesse nível básico da análise macroeconômica. No primeiro caso se incluem principalmente dois resultados: (1) a ênfase causal na *demanda*, presente tanto em Keynes quanto em Kalecki, que a “tesoura” marshalliana, tão atrativa para os economistas ortodoxos, rejeita por princípio, e que foi rapidamente descaracterizada pela teoria macroeconômica neoclássica subsequente, a ponto de que hoje a disciplina chegou mesmo a inverter aquela ênfase original¹⁷; e (2) a abertura para a análise *dinâmica*, que permanece apenas latente em Keynes mas que Kalecki tão bem desenvolve – como veremos na última seção –, e é grandemente facilitada pela exclusão do equilíbrio, que além de enganoso é teoricamente desnecessário e de compatibilidade mais problemática com uma análise dinâmica. No segundo caso, destaca-se a maior facilidade de esclarecimento dos motivos que devem levar à rejeição das várias interpretações equívocas que as abordagens macroeconômicas dominantes – sejam pré-keynesianas, keynesianas neoclássicas (incluindo as chamadas novo-keynesianas), anti-keynesianas (como as chamadas novo-clássicas) ou apenas convencionais – fazem de agregados macroeconômicos, especialmente da poupança e sua relação com o investimento, como veremos na seção seguinte.

¹⁷ A macroeconomia da “oferta agregada” – ausente analiticamente em Keynes e completamente em Kalecki – veio aumentando de peso desde o advento da curva de Phillips, que como se sabe já havia assumido preponderância no debate de política macroeconômica nos anos 60.

3. A relação poupança-investimento

Apesar da multiplicidade de conceituações de que a poupança foi objeto na teoria econômica, pelo menos sua definição contábil tornou-se razoavelmente consensual a partir do desenvolvimento das técnicas de contabilidade social, especialmente após a obra de Keynes. Desde então aceita-se amplamente que a poupança – podendo ser real ou nominal, bruta ou líquida, além de outros detalhes contábeis que podemos deixar de lado – seja definida como o fluxo de renda correspondente à diferença entre a renda disponível (após impostos) e o consumo. Isso significa que divergências quanto à sua conceituação e significado econômico estarão refletindo diferenças teóricas, e *não* meramente definicionais.

Kalecki mostra¹⁸ como, no caso geral, a poupança agregada é determinada a partir da equação (2) de determinação da renda: introduzindo os impostos menos transferências (representados a seguir por T) e subtraindo-os de ambos os lados da equação determina-se a renda disponível; subtraindo, além disso, de ambos os membros o consumo total (dos capitalistas e dos trabalhadores), obtém-se a poupança total (S):

$$S \equiv I + (X - M) + (G - T) \quad (5).$$

É essencial observar que *permanece*, proveniente da equação (2), como decorrência lógica do P.D.E., a relação de *determinação* unilateral do gasto para a renda – neste caso, do *investimento*, somado ao *saldo da balança comercial* e ao *déficit público*, para a *poupança*. É claro ainda que, se os saldos do governo e do setor externo forem nulos, a poupança será igual ao investimento – sendo por ele *necessariamente* determinada.

Como na formulação do P.D.E. acima, é importante destacar aquilo que, embora muitas vezes arraigado no senso comum, *não* caracteriza a poupança *nem* sua relação com o investimento:

(i) A poupança *não* financia o investimento, em nenhum sentido teoricamente inteligível. Primeiro, porque ela não precede, nem temporal nem logicamente, o investimento (inexiste logicamente uma poupança *ex ante*); ela é por definição um fluxo de rendimentos *simultâneo* ao investimento¹⁹ e *por ele determinado*. Segundo, porque quem financia o investimento é o *crédito*, este sim, um *estoque* – de poder de compra, criado *ex nihilo* pelo sistema bancário – que *precede* lógica e temporalmente o investimento; aliás,

¹⁸ KALECKI (1954), cap. 3.

¹⁹ Uma das questões mais sutis em teoria econômica, nem sempre observada com o necessário cuidado, é a distinção entre estoques e fluxos. Em Economia, diferentemente das Ciências Físicas, os fluxos não são normalmente definidos como derivadas temporais de variáveis de estoque, mas como resultados *instantâneos* de transações realizadas – medidos tanto pelo lado do dispêndio (gastos) como da receita (rendimentos, produto, etc.); todo fluxo, ao contrário de um estoque, “desaparece” no momento em que é criado. Ao nível agregado, são definidos como um somatório dos fluxos individuais ao longo de um *período contábil discreto* arbitrário – não mais instantâneo, apenas porque as transações normalmente não são sincrônicas. A poupança, como o investimento, é por definição um *fluxo*, e *não um estoque*, ao contrário do *crédito*. Como todo fluxo, é definida ao nível desagregado (das transações individuais) de forma instantânea, e no agregado no mesmo período contábil em que se queira definir o investimento que a determina, no caso simplificado (abstraindo saldos do setor externo e do governo). Só o *poder de compra*, que por definição é um estoque resultante de reservas líquidas ou criado pelo *crédito*, pode *financiar* (no sentido de liberar liquidez para um dispêndio) algum gasto, incluindo o investimento.

costuma ser essencial para viabilizar os investimentos devido à magnitude normalmente elevada destes *vis-à-vis* às receitas líquidas correntes capitalizadas pelas empresas.

A alegação, às vezes encontrada em autores pós-keynesianos, de que a poupança, se não contribui para o financiamento do investimento, é importante para o seu *funding*, mediante o alongamento dos prazos de aplicação essenciais para viabilizar o investimento em escala agregada significativa, incorre num erro conceitual. Quem pode contribuir para tanto é a “poupança” em sentido coloquial, às vezes associada a aplicações em fundos de investimento, que constitui um *estoque* e nada tem a ver com o *fluxo* macroeconômico chamado poupança; no máximo, esta dá indiretamente uma contribuição marginal para eles, dependendo de *se*²⁰ e *como* o estoque de riqueza derivado da poupança é transformado em aplicação financeira. Por outro lado, quando Kalecki afirma que o investimento se “financia a si próprio”²¹ está, na forma um tanto imprecisa em que cunha suas frases de efeito, chamando a atenção para dois aspectos: (1) que a poupança *não* financia o investimento; e (2) que o próprio gasto realizado na compra (eventualmente financiada) de bens de investimento gera instantaneamente lucros, com eles poupança e, finalmente mas não menos importante, libera um igual montante de liquidez à disposição do conjunto dos capitalistas no sistema bancário²².

(ii) A poupança *não* resulta de “atos” voluntários por parte dos agentes econômicos: ela é, como qualquer outra variável de renda, estritamente *residual*, isto é, *determinada* por *outras variáveis* (de *gasto*). É, aliás, o que diz expressamente Keynes na *Teoria Geral*²³, que como se sabe mudou inteiramente sua concepção a esse respeito em relação ao *Treatise on Money*, tornando-a no essencial idêntica à de Kalecki. Por isso, a determinação de um montante qualquer, individual ou agregado, de poupança *não pode*, em nome de nenhuma opção teórica, e *por razões de ordem lógica* derivadas do P.D.E., *ser objeto ou resultado da vontade ou da decisão dos agentes* - como por exemplo, na forma neoclássica ainda hoje mais difundida, postergando o consumo para uma data futura e emprestando os recursos correspondentes em função crescente da taxa de juros. Em poucas palavras: de acordo com o P.D.E., não se pode decidir o que se ganha, mas sim o que se gasta; logo, *não se pode decidir a diferença* entre o que se ganha - no caso, a renda - e o que se gasta - no caso, o consumo. O que é chamado no quotidiano de “poupança”, como visto, não é em absoluto poupança no sentido técnico: é uma *aplicação de capital*, ou seja, uma decisão de composição da carteira de ativos de um agente, e portanto relativa ao seu *estoque* de riqueza, e não a um eventual *fluxo* - por definição prévio, e já extinto economicamente - de *poupança* que tenha efetuado. A poupança é tão *residual* e *involuntária* quanto a renda²⁴.

²⁰ Não é nem um pouco óbvio que a poupança se “converta” - as aspas derivam do fato, vale repetir, de que o fluxo de poupança já desapareceu quando a riqueza a ela correspondente é aplicada - em ativos financeiros, muito menos vinculados a fundos de investimento. É inteiramente usual manterem-se estoques de riqueza fora do sistema bancário - até mesmo em forma líquida, porém mais freqüentemente em bens duráveis e imóveis.

²¹ KALECKI (1954), cap. 3, p. 50.

²² Em KALECKI (1935), pp. 28-30, encontra-se uma descrição mais detalhada desse mecanismo de criação simultânea de lucros, poupança e liquidez pelo gasto em investimento. A conhecida intervenção de KEYNES (1937a) quanto à distinção entre poupança, crédito e a liquidez correspondente - o famoso motivo “*finance*” para reter liquidez associada ao investimento -, assim como a impossibilidade lógica de uma “poupança *ex ante*”, é tão ou mais esclarecedora.

²³ KEYNES (1936), cap. 6, pp. 64-5.

²⁴ Keynes, *ibidem*, chega a afirmar, ao concluir o capítulo de forma idêntica à famosa passagem de Kalecki sobre a determinação dos lucros antes referida, que “uma decisão de consumir ou não consumir está de fato ao alcance do indivíduo; tal como uma decisão de investir ou não investir”. Mas os montantes de renda e poupança são incapazes de “... assumir um valor independente resultante de um conjunto distinto de decisões tomadas sem relação com as decisões quanto ao consumo e ao investimento. De acordo com este princípio, a

Como corolário dessa argumentação, cabe ainda questionar um dos instrumentos de análise mais elementares e corriqueiros utilizados em Macroeconomia “aberta”. Tomando-se novamente a equação (5) que determina a poupança total, acompanhemos o seguinte procedimento convencional: redefina-se esta poupança total como poupança privada (o que é válido), denotando-a por S_p ; e defina-se como “poupança do governo” (S_g) por raciocínio análogo o termo $(T - G)$, e como “poupança externa” (S_x) – nesse caso por pura simetria – o déficit da balança comercial $(M - X)$. Tem-se então, reagrupando os termos:

$$S_p + S_g + S_x = I \quad (6).$$

Note-se que, embora esta forma de apresentação não esteja “errada” em sentido formal – é mera derivação matemática da equação da poupança, com redefinições –, pode prestar-se, e de fato se presta com freqüência, a interpretações enganosas, quando não claramente incompatíveis com o P.D.E.. Primeiro, porque *desapareceu* a relação de determinação, simbolizada pela seta, uma vez que se encontram de *ambos* os lados da equação componentes autônomos de gasto: afinal, não é por passarem a ser chamados de “despoupança” que o déficit público e o superávit externo deixam de ser determinados por gastos autônomos. Segundo, porque esta equação (6) é um convite – geralmente aceito pelos economistas das mais variadas extrações teóricas – à interpretação errônea de que o lado esquerdo, a “poupança total”, mediante a contribuição de cada um dos seus “componentes”, *financia* o lado direito, o investimento. Mais ainda, quase sempre se argumenta como se os “esforços” (*sic*) de poupança dos setores privado, público e externo fossem *complementares*.

Ora, o erro é triplo: primeiro, como visto, porque a poupança é sempre involuntária e não pode resultar do esforço de ninguém. Segundo, conforme item anterior, porque ela não financia nenhum gasto. Terceiro, e mais sutil, porque tais “componentes” *não são complementares entre si*, como parece sugerir a forma de apresentação: a troca de posição, na equação, do déficit do governo e do saldo do comércio exterior não impede que continuem, *juntamente com o investimento, co-determinando a poupança* (privada). Assim, por exemplo, em nenhuma hipótese um eventual nível baixo da “poupança privada” – que nada mais é que a poupança na definição usual, adotada por Kalecki – poderia ser “reforçado” por um aumento quer da “poupança do governo”, quer da “poupança externa”. *Ao contrário*: dado o investimento, tais aumentos teriam necessariamente o efeito de *diminuir ainda mais* a poupança privada! A causalidade envolvida só fica clara retornando à equação (5), onde se vê que a poupança privada é *determinada* pelo investimento e pelas outras duas “despoupanças”, não tendo possibilidade de apresentar qualquer variação autônoma. Portanto, na equação (6), enquanto por um lado a poupança privada não pode se modificar independentemente, por outro lado qualquer alteração autônoma nas poupanças “externa” e “pública” implicará fatalmente alteração *inversa e da mesma magnitude* na poupança privada, para um dado investimento; da mesma forma que uma alteração no investimento *ceteris paribus* provocará efeito *direto e de igual magnitude*, apenas sobre a poupança privada e não sobre os outros dois componentes, que são basicamente²⁵ autônomos. A conclusão rigorosa à luz do P.D.E. é que, para um dado nível de investimento, a poupança privada é *determinada* pelos outros dois componentes de “poupança”, *variando inversamente com cada um deles*. Em outras palavras, a suposta

concepção de *propensão a consumir* substituirá, no que segue, a propensão ou disposição de poupar” (p. 65; itálico no original).

²⁵ Embora possa haver, em períodos subseqüentes, algum efeito crescente sobre as importações e sobre as receitas públicas, aumentando assim, em alguma medida, também essas “poupanças”.

complementaridade entre os componentes de poupança é mera aparência enganosa: a poupança privada *sempre* se reduz *pro tanto* frente a um aumento autônomo das “poupanças” pública e externa, tanto quanto frente a uma redução autônoma do investimento.

(iii) Por fim, a poupança *não* requer nenhuma noção de *equilíbrio* para ser definida. Não se trata apenas da notória rejeição da (neo)clássica noção de que a igualdade poupança-investimento se daria mediante o ajustamento da taxa de juros a uma posição de equilíbrio, como nas teorias de “fundo de empréstimo” ou semelhantes, o que foi feito explicitamente tanto por Keynes como por Kalecki. O senso comum macroeconômico considera essencial para essa rejeição que a poupança *não* seja função da taxa de juros – o que certamente é uma condição suficiente, mas mal-formulada. De acordo com os argumentos anteriores, com base no P.D.E., a poupança *não é função de coisa alguma* – pela simples razão de que é *totalmente determinada* pelo investimento (no caso simplificado; *mutatis mutandis* no caso geral). Mas a tradição keynesiana convencional – em Kalecki existe o mesmo raciocínio, ainda que atenuado pela presença explícita da distribuição de renda – acrescenta que ela é função do nível de renda, como decorrência da função consumo: se este é uma dada função da renda, não há como negar que a poupança, seu complemento em relação à renda, também o seja. Tampouco há como negar que em várias passagens na Teoria Geral Keynes assumiu claramente essa posição.

Como conciliar a aparente contradição? Reconhecendo que ela *é* aparente. Por um lado, a contabilidade e o P.D.E. conjuntamente asseguram que a poupança seja *sempre igual e determinada* pelo investimento. Por outro lado, assumir alguma função consumo *não* implica supor que o consumo seja *sempre* uma proporção desejada da renda – ou ainda, que os consumidores estejam sempre em “equilíbrio”. Isto só poderá acontecer, mesmo assim condicionado a uma *tendência efetiva* e não apenas a uma possibilidade lógica, decorrido o “tempo necessário” para que o consumo e a renda se ajustem a níveis tais que a diferença entre eles seja igual ao investimento dado (o mesmo vale para o modelo de Kalecki, feita a devida adaptação para uma dada distribuição de renda) – obviamente o conhecido mecanismo multiplicador, presente tanto em Keynes quanto em Kalecki²⁶. Acontece que aquele “tempo necessário” para o ajustamento é *indeterminado*, podendo situar-se *entre zero e infinito*; o multiplicador é um mecanismo potencial, típico de estática comparativa, e por isso sem definição temporal precisa, uma vez que depende totalmente de como se comportam as expectativas de curto prazo (ligadas às decisões de produção), além de supor o investimento constante durante o ajuste²⁷.

Assim, os consumidores podem permanecer *indefinidamente* em “desequilíbrio” em termos de suas decisões de consumir como proporção da renda corrente, mesmo que se assuma a existência de funções consumo desse tipo (o que é muito discutível); ou, em outras palavras, realizando *indefinidamente* níveis *involuntários* de poupança, sem que isso acarrete qualquer problema nem para a hipótese de que *exista* uma dada função consumo ao nível individual e portanto agregado, nem (muito menos) para a determinação contábil e causal do P.D.E., pela qual a poupança *permanecerá continuamente* igual ao investimento. O “tempo” que o efeito multiplicador pode “levar” para completar-se é uma falsa questão, tanto do ponto de vista lógico (já que é um efeito apenas potencial, e não dinâmico) quanto

²⁶ Neste último, veja-se *ibidem*, cap. 5.

²⁷ A respeito POSSAS (1987), pp. 88-91.

em suas implicações para a determinação da poupança²⁸. O que não deveria surpreender, se considerarmos que à luz do P.D.E. a *renda é tão involuntária quanto a poupança*. Por que então deveríamos estranhar que os consumidores permaneçam indefinidamente em desequilíbrio quanto às proporções da *renda* que consomem ou que poupam, se *tudo* o que podem decidir é o *consumo*?

**

Resta concluir que *todo* o peso da teoria recai sobre o *investimento*, e *nenhum* sobre a *poupança*, de forma totalmente contrária ao senso comum dos “leigos” tanto quanto dos economistas. Simplesmente *desaparece* a “relação” poupança-investimento para qualquer efeito teórico ou prático relevante, em detrimento de toneladas de papel produzidas sobre ela. O problema econômico central para a análise do funcionamento da economia capitalista, como Kalecki corretamente identificou, volta-se para a teoria dos *determinantes do investimento* e de seus efeitos. É o que será abordado na seção seguinte.

²⁸ Todo um extenso debate prosperou sobre esse tema no campo pós-keynesiano, a partir de um artigo clássico de ASIMAKOPOULOS (1983). A essência do debate, ressalvadas algumas intervenções específicas, está comprometida por esse mal-entendido a respeito do que deve significar uma função consumo *da renda* (e por implicação uma “função poupança”) e um eventual “equilíbrio do consumidor” no contexto do P.D.E..

4. Investimento, dinâmica e instabilidade da economia capitalista

O investimento era, para os fundadores da Macroeconomia, a variável central para explicar o funcionamento da economia capitalista em seu conjunto, pelos seus impactos quer sobre a determinação do nível de atividade, quer sobre a sua dinâmica²⁹. Esta centralidade não deriva certamente do peso do investimento no produto de uma economia capitalista, que é muito inferior ao do consumo; mas de sua muito maior *autonomia* em relação ao nível de atividade³⁰, o que o torna uma variável-chave para a determinação endógena não apenas desse mesmo *nível de atividade*, como também de suas *variações*, eventualmente de suas *flutuações* e mesmo de sua possível *instabilidade*.

É lamentável que este tipo de *insight* teórico tenha-se dissipado ao longo dos anos, a ponto de que a Macroeconomia contemporânea não dá qualquer destaque à análise do investimento, quase na mesma medida em que relega no máximo à “História do Pensamento Econômico” a centralidade teórica da demanda justificada pelo P.D.E.. Isto porque o papel crucial do investimento como variável *determinante* macroeconômica decorre exatamente da ênfase na *demanda* como determinante do nível de atividade: o efeito multiplicador, não por acaso quase inteiramente abandonado pelo ensino e pela análise macroeconômica atual, é apenas a ilustração mais didática e difundida dessa vinculação entre a importância macroeconômica do investimento (comparativamente ao consumo e aos demais componentes, exógenos, da demanda agregada) e a importância da demanda efetiva como princípio de determinação causal do nível de atividade econômica.

Embora Kalecki não tenha chegado a elaborar uma teoria do investimento tão completa e sofisticada como a de Keynes, inclusive pela abrangência monetária e financeira deste último, teve ao menos o mérito de formulá-la de modo *diretamente* voltado para os seus efeitos *dinâmicos*³¹. Em contrapartida, seu maior defeito em comparação com Keynes é a ausência de um tratamento explícito das expectativas³².

Por outro lado, é fundamental assinalar desde já o que acredito ser uma *premissa metodológica central* (ainda que em boa medida implícita), não só do modelo de investimento de Kalecki, mas de *toda* a sua teoria da dinâmica econômica capitalista, a saber: a *estrutura econômica estável* – significando ausência de mudanças tecnológicas, das estruturas produtiva e de mercado, e da política econômica. Como se verá adiante, tal

²⁹ Isto vale não só para Kalecki, mas também para Keynes. Que este último não tenha desenvolvido uma teoria dinâmica não impede que tivesse uma idéia clara sobre sua importância e sobre o papel do investimento nela; por exemplo, KEYNES (1936), cap. 22.

³⁰ Assim como, em Keynes, pelo fato de estar apoiado em expectativas de longo prazo essencialmente voláteis devido à presença de incerteza.

³¹ Além de ter evitado algumas ambigüidades de origem neoclássica presentes em Keynes, a maioria envolvida no conceito de eficiência marginal do capital e na hipótese de que esta é decrescente com o nível de investimento. Embora tudo isso possa a meu ver ser bem esclarecido teoricamente – minha opinião a respeito está condensada em POSSAS (1987), pp. 137 ss. -, as ambigüidades e a aparência (mais que o conteúdo) neoclássica afastaram muito autores não-ortodoxos da posição de Keynes, especialmente marxistas e neo-ricardianos.

³² Este talvez seja um problema datado: não era usual naquela época explicitar expectativas; em geral se supunha implicitamente que eram de tipo adaptativo ou corretivo. Hoje tal procedimento seria considerado inaceitável. De qualquer forma, ter explicitado a questão é um mérito inegável de Keynes, mesmo que se discorde de pontos específicos de sua análise.

pressuposto subjacente ajuda a compreender mais precisamente não só o *alcance da teoria*, mas muito do que pode aparecer à primeira vista como sendo suas *limitações*.

Em suas sucessivas formas de apresentação, o modelo kaleckiano dos determinantes do investimento preserva alguns pontos básicos em comum. Do ponto de vista da estrutura do modelo, o investimento (particularmente em capital fixo) é função (i) do *nível* de atividade, em geral por influência da acumulação interna de lucros das empresas, que tendem em certa medida a reinvesti-los; (ii) das *variações* deste nível, expressas geralmente em termos de variações da taxa de lucro; e (iii) de componentes *exógenos*, relacionados a oportunidades de investimento não derivadas da atividade corrente, basicamente ditadas pelo ritmo de inovações e outras fontes de mudança estrutural.

Na versão de 1954, que considero a mais completa, esse modelo é expresso pela seguinte equação (agregada, mas que reflete as decisões individuais dos empresários), bastante conhecida pelos estudiosos de Kalecki³³:

$$F_{t+\tau} = aS_t + b\Delta P_t / \Delta t - c\Delta K_t / \Delta t + d \quad (7),$$

onde F é o investimento em capital fixo; τ a defasagem média entre as encomendas e a entrada em operação do novo investimento; S a poupança bruta agregada, tomada como *proxy* da acumulação interna de lucros das empresas (lucros retidos para capitalização); K_t o estoque de capital ao final do período t ; e o termo independente d capta as decisões de investir autônomas (que o autor associa a “fatores de desenvolvimento”, basicamente inovações e outros investimentos que independem do nível corrente de atividade³⁴). Os três componentes estruturais mencionados acima estão assim presentes: o termo aS_t exprime a influência do *nível* corrente de atividade; a combinação de $b\Delta P_t / \Delta t$ com $-c\Delta K_t / \Delta t$ exprime a influência das *variações do nível* de atividade; e o termo d representa o componente *autônomo* do investimento.

Sobre essa bem conhecida equação, basta registrar brevemente que:

(i) o primeiro termo procura captar basicamente a influência positiva sobre as decisões de investir da capacidade de auto-financiamento das empresas, seja diretamente, seja principalmente por permitir reduzir o nível de endividamento e com isso habilitar-se a novos empréstimos sem incorrer num “risco crescente” de insolvência associado ao endividamento crescente³⁵;

(ii) os segundo e terceiro termos tomados em conjunto representam uma linearização aproximada da taxa de variação da taxa de lucros. Dada a já referida premissa assumida por Kalecki ao longo de todo o seu modelo macroeconômico, de uma *estrutura econômica estável*, segue-se que tais variações estão traduzindo apenas os fatores *conjunturais* que

³³ KALECKI (1954), cap. 9.

³⁴ KALECKI (1954), cap. 15.

³⁵ Não se trata, obviamente, de uma regressão “pré-keynesiana” (e “pré-kaleckiana”) a uma suposta influência da poupança sobre o investimento; ela aparece aí como *proxy* da poupança das empresas (uma certa fração da poupança privada total), que por sua vez procura indicar sua capacidade de retenção de lucros e portanto de auto-financiamento. O problema neste termo está mais na especificação inadequada dessa influência, que a meu ver deveria ser expressa não em termos de uma função linear de uma variável contínua, mas de uma *restrição*, portanto não-linear. Do contrário resulta que, estranhamente, haveria uma tendência ao reinvestimento automático, mesmo na ausência de motivos para investir ligados às condições de mercado – ou seja, mesmo que os demais termos fossem nulos.

afetam a taxa de lucros – essencialmente o *grau de utilização* da capacidade produtiva. Assim, a interpretação mais coerente (sugerida pelo próprio autor) é que o termo em ΔP exprime *ceteris paribus* o efeito positivo sobre o investimento de maior grau de utilização da capacidade, enquanto o termo em $-\Delta K$ exprime o efeito negativo de maior capacidade ociosa, de forma que em conjunto representam o efeito líquido de variações no grau de utilização;

(iii) o termo independente d , como mencionado, condensa todos os componentes autônomos do investimento, isto é, que não são diretamente afetados pela atividade econômica corrente e rotineira. Seu tratamento exógeno no modelo é coerente com a análise sistemática de uma estrutura econômica estável adotada pelo autor, com o que os fatores de mudança estrutural *devem mesmo* ser explicados *ad hoc*. Abrange especialmente os investimentos em inovações e aqueles de longa maturação, cuja rentabilidade esperada não pode resultar da projeção dos resultados correntes.

Convém nesse ponto fazer uma digressão teórica. Em comparação com a teoria de Keynes, as principais lacunas do modelo de Kalecki seriam a ausência de tratamento da taxa de juros e da formação de expectativas de longo prazo. Quanto ao primeiro aspecto, uma discussão prévia do autor³⁶ justificou deixá-la de lado tanto por seu comportamento estável a longo prazo quanto pela premissa de que a política monetária seja também estável e não muito restritiva (de forma tal que a taxa de juros não chegue a prejudicar os investimentos)³⁷. Quanto às expectativas, o problema é um pouco mais complexo. Na verdade, os modelos de investimento e ciclo de Kalecki têm sido acusados por diferentes autores, de Schumpeter a pós-keynesianos, de conterem pouca historicidade e excesso de “mecanicismo”, parte do qual se deve, ao menos do ponto de vista pós-keynesiano, à ausência de uma análise de expectativas. No caso presente, creio que há um mal-entendido que pode ser sanado satisfatoriamente.

Vale retomar aqui a premissa de *estrutura econômica estável* do modelo de Kalecki e explorar brevemente uma possível implicação desta para a análise de expectativas. Em primeiro lugar, é preciso admitir que o autor simplesmente *não* introduziu expectativas em nenhum de seus modelos; ao menos, não de forma explícita, o que a meu ver é mesmo passível de sérias críticas. O que quero apontar é outro aspecto, que acredito ser mais relevante: seu modelo é *inteiramente compatível* com a adoção de uma hipótese de expectativas que hoje seriam chamadas de “adaptativas” – de resto, mais ou menos implícitas em todos os principais modelos neo-keynesianos de crescimento e ciclo econômico, de Harrod-Domar a Pasinetti, que assumiram alguma versão simples de função investimento baseada no princípio do acelerador. Em suas diferentes versões, este princípio traduz o essencial desse conceito de expectativas, ao conter implicitamente projeções e/ou correções das expectativas em função de resultados de mercado recém-observados³⁸.

O modelo de investimento de Kalecki, embora não seja estritamente do tipo acelerador, segue essencialmente o mesmo critério, particularmente visível nos componentes da equação que captam a variação *observada* da taxa de lucros como *proxy* da

³⁶ KALECKI (1954), cap. 7.

³⁷ Cabe aqui um breve comentário sobre a diferença de escopo das teorias de Keynes e de Kalecki. Este último só está desobrigado de introduzir a taxa de juros em sua análise porque ela não se propõe uma discussão teórica geral da aplicação de capital, o que certamente também incluiria ativos financeiros e moeda, e portanto os juros como *remuneração alternativa* ao capital, como em Keynes, e não apenas como custo financeiro do investimento, como em Kalecki.

³⁸ Ver a respeito POSSAS (1987), pp. 117-124.

variação do *grau de utilização* da capacidade produtiva (item (ii) acima). Isto porque essa variação pode ser interpretada como *esperada*, mediante uma simples *projeção* da *observada*. A *rationale* de se formar expectativas dessa maneira pode ser explicada a partir de um *insight* notável de Keynes em sua análise das expectativas de longo prazo, particularmente sob incerteza “forte” ou “Knightiana” (não redutível a risco), sistematicamente assumida por Keynes.

O raciocínio segue duas etapas: em primeiro lugar, a formação de expectativas de longo prazo sob incerteza, *em condições de relativa estabilidade das variáveis relevantes*, tende a seguir um *padrão compartilhado* pela maior parte do mercado (denominado por Keynes de “*convenção*”)³⁹. Em segundo lugar, a forma *mais simples imaginável* de comportamento “convencional” na formação dessas expectativas consiste na *projeção*, para um período à frente, do comportamento de taxas de crescimento de mercado recém-observadas – o que Keynes chamou de “teoria prática do futuro”⁴⁰ – coincidindo também, especificamente, com a forma mais simples possível de “expectativas adaptativas”. Portanto, dada a premissa de *estrutura estável* do modelo de Kalecki, está justificada a adoção do critério projetivo em seu modelo, que pode ser interpretado como contendo implicitamente expectativas “convencionais”, de tipo adaptativo de um período. Desse modo Keynes, paradoxalmente, pode ajudar a dar fundamentação teórica para um tipo de modelo que a maioria dos keynesianos “puros” – os pós-keynesianos – considera teoricamente seu “antípoda” e primitivo, pela ausência de expectativas explícitas.

Retornando ao modelo de Kalecki, o passo seguinte na direção de um modelo dinâmico completo é adicionar à equação (7) do investimento algum tipo de relação inversa entre nível de atividade e investimento - isto é, do investimento para a renda, ao estilo dos modelos neo-keynesianos de crescimento e ciclo baseados na interação multiplicador-acelerador. É o que faz Kalecki, cujo modelo de ciclo econômico, apesar de não adotar estritamente uma função tipo acelerador para o investimento, pode ser considerado estruturalmente parte dessa mesma “família” de modelos neo-keynesianos. Para tanto retoma o seu próprio multiplicador, que se desdobra em duas etapas: o efeito de variações do investimento sobre os lucros (dada a propensão a consumir dos capitalistas), e destes sobre a renda (dados os parâmetros distributivos setoriais que explicam a participação agregada dos salários e lucros na renda)⁴¹. Após adicionar ao investimento a variação de estoques, substituir ambos os efeitos multiplicadores na equação (7), converter ΔK em investimento em capital fixo e S em investimento, e remanejando os termos, Kalecki obtém finalmente a seguinte equação dinâmica expressa em termos do investimento líquido i (sem reconstituir aqui essas passagens formais):

$$i_{t+\theta} = \frac{a}{1+c} i_t + \mu \cdot \frac{\Delta i_t}{\Delta t} + g \quad (8),$$

³⁹ KEYNES (1936), cap. 12. Embora o autor tenha formulado esse conceito referindo-se à formação de expectativas em mercados financeiros, o contexto geral de análise de expectativas de longo prazo que caracteriza este capítulo como um todo, bem como o conteúdo mesmo do conceito, justifica a meu ver estendê-lo inteiramente para as expectativas de longo prazo em mercados de produtos, e portanto para a análise do investimento produtivo.

⁴⁰ KEYNES (1937b), p. 114-115.

⁴¹ KALECKI (1954), cap. 5.

onde $\theta \approx \tau$, μ é um parâmetro função direta do multiplicador e g é função direta do componente autônomo do investimento d e inversa da depreciação do capital fixo⁴².

Essa equação a diferenças finitas linear, com termo independente constante (embora possa modificar-se a “longo prazo”), tem como solução possível (ainda que não necessária, dependendo dos valores dos parâmetros) uma trajetória de *flutuações* em torno a uma *tendência* definida exogenamente pelo componente g . Kalecki explora intuitivamente, sem seguir na formalização, as propriedades dessa trajetória, especialmente assumindo que os parâmetros, sob valores realistas, permitam a ocorrência de flutuações.

No entanto, é muito fácil obter uma solução formal a partir desse ponto, o que permite dar uma interpretação mais precisa do comportamento da trajetória em função dos valores dos parâmetros. Sem a intenção de reproduzir aqui todas as conseqüências desse procedimento⁴³, basta notar que a equação (8) pode ser facilmente posta na forma canônica de uma equação a diferenças finitas apenas introduzindo a seguinte condição adicional:

$$\Delta t = \theta = 1 \quad (9),$$

que, na verdade, envolve *duas* condições: (i) tomar o intervalo médio de reação dos empresários, Δt , frente ao comportamento do grau de utilização da capacidade, como *igual* à defasagem θ entre encomenda e construção dos investimentos, na suposição razoável de que os empresários tomam o *mesmo* período de maturação do investimento θ tanto como intervalo de referência para formar suas expectativas acerca do período seguinte durante o qual o novo investimento estará operando, quanto como *período de investimento*, ou seja, como o intervalo normal entre duas decisões consecutivas de investir; e (ii) tomar *este mesmo* intervalo de tempo como unidade de tempo do modelo - em lugar, por exemplo, de um período meramente contábil, como é mais usual.

Além disso, pode-se convencionalmente definir $\Delta i_t = i_t - i_{t-1}$. Com isso e a condição (9), após simples remanejamento dos termos e das defasagens, a equação (8) se reduz a:

$$i_{t+2} - \left(\mu + \frac{\alpha}{1+c}\right)i_{t+1} + \mu \cdot i_t = g \quad (10).$$

Esta é uma equação a diferenças finitas linear de 2ª ordem com termo constante (g), cuja solução homogênea terá a forma de *flutuações* - que Kalecki procurava explicitar - se e só se suas raízes características forem complexas conjugadas, o que impõe para os parâmetros da equação a condição:

⁴² Kalecki faz por hipótese $g=0$, alegando que pretende tratar inicialmente do “ciclo puro”, sem tendência. O procedimento me parece desnecessário, podendo confundir o leitor menos versado em equações diferenciais, ao causar a falsa impressão de que está se referindo a uma economia que pode flutuar em torno de um nível de atividade estacionário (que ele chama no jargão marxista de “reprodução simples”), quando na verdade está simplesmente se referindo ao componente de flutuações (solução homogênea da equação diferencial) da trajetória de uma economia capitalista qualquer, em princípio não-estacionária.

⁴³ Ver POSSAS (1987), pp. 149 ss.

$$\frac{a}{1+c} < 2\sqrt{\mu} - \mu \quad (11)^{44}.$$

Além disso, a ocorrência de trajetórias explosivas, regulares ou amortecidas – sejam cíclicas ou não – dependem apenas do parâmetro μ ; respectivamente, que $\mu > 1$, $\mu = 1$ e $\mu < 1$.

Caso a condição (11) para que se obtenham flutuações – a que interessava Kalecki – seja satisfeita, a solução completa do modelo, ou sua trajetória resultante, dada pela soma da solução homogênea com a solução particular, será:

$$i_t = Ar^t \cos(\omega t + \varepsilon) + \bar{i} \quad (12),$$

onde A depende da escala, de ε e das condições iniciais, ε é constante de fase arbitrária, $r = \sqrt{\mu}$ é o parâmetro de amplitude das flutuações, $\omega = \frac{2\pi}{T}$, onde T é o período das flutuações expresso em número de períodos de investimento, sendo ω uma função⁴⁵ dos parâmetros μ e $\frac{a}{1+c}$; e \bar{i} é a solução particular (tendência), como dito antes uma função crescente do componente autônomo d do investimento, e portanto dos “fatores de desenvolvimento”.

O resultado deste modelo de ciclo econômico de Kalecki – que considero o melhor deste autor⁴⁶ – permite algumas conclusões interessantes, das quais pretendo a seguir destacar uma de ordem modelística e outras duas, bem mais importantes, de ordem teórica.

(i) Mesmo considerando-se que o modelo de Kalecki é *teórico*, e não aplicado, e portanto deve estar imune a críticas quanto ao grau de realismo ou precisão de seus resultados, ele passa no teste de *plausibilidade* da trajetória por ele gerada. De fato, tomando-se os próprios dados utilizados pelo autor ao longo de todo o seu livro, e aplicando-se os valores extremos para cada um dos parâmetros envolvidos, obtêm-se os seguintes intervalos mais prováveis para os parâmetros básicos do modelo, μ e $\frac{a}{1+c}$:

⁴⁴ Note-se de passagem que essa condição inclui, como condição *necessária* (não suficiente) à ocorrência de flutuações, que $\frac{a}{1+c} < 1$, explicitada mais de uma vez de forma intuitiva por Kalecki.

⁴⁵ A expressão é $\omega = \cos^{-1} \left[\frac{\mu + \frac{a}{1+c}}{2\sqrt{\mu}} \right]$.

⁴⁶ O último modelo de ciclo do autor, desenvolvido em KALECKI (1968), na sua estrutura formal praticamente não difere do de 1954: as flutuações continuam dependendo de que o investimento seja função do nível de atividade e de suas variações, e a tendência continua dependendo de componentes autônomos da demanda agregada, notadamente do investimento. Por outro lado, apresenta a meu ver um retrocesso teórico ao tentar sem sucesso introduzir efeitos endógenos do progresso técnico, obscurecendo o resultado antes claro de que o progresso técnico, ainda que “endógeno” no sentido econômico, tem relação com a tendência e não com o ciclo.

$$0,75 < \mu < 1,12 \quad \text{e} \quad 0,6 < \frac{a}{1+c} < 0,8;$$

donde resulta respectivamente, para os parâmetros de amplitude e período das flutuações,

$$0,87 < r < 1,06 \quad \text{e} \quad 9,3 < T < 14,5.$$

Note-se que esses valores são bastante “bem-comportados”. O parâmetro r de amplitude se situa no entorno de 1, o que significa, caso a condição de ocorrência de ciclo seja cumprida – o que também não requer nenhuma hipótese heróica⁴⁷, diversamente da maioria dos modelos de acelerador – que as flutuações serão bastante próximas de regulares. Quanto ao período T do ciclo, situa-se no entorno de 11 períodos de investimento; assumindo que estes estejam situados em média um pouco acima de um ano, tem-se algo como um período decenal (ciclo “Juglar”, na denominação de Schumpeter) para as flutuações, exatamente o que os modelos de ciclo vinham buscando há décadas⁴⁸.

(ii) Uma *primeira conclusão teórica central* do modelo de Kalecki, nem sempre bem compreendida, é que a dinâmica por assim dizer “associada à demanda efetiva” da economia capitalista – isto é, abstraindo-se o progresso técnico e as mudanças estruturais – é caracterizada pela ocorrência de *flutuações*. Isto significa basicamente duas coisas: em *primeiro* lugar, que é possível explicar o ciclo econômico *apenas* com o comportamento “rotineiro” do nível de atividade, sem as armas poderosas da mudança estrutural e do progresso técnico, ao contrário do que fez Schumpeter⁴⁹; e, em *segundo*, que mesmo sob condições de *estrutura estável* (o que também pressupõe ausência de *estratégias* não-convencionais ou não-rotineiras por parte dos agentes – inclusive inovações), *ainda assim* a economia *não tenderia* a um equilíbrio em sentido estrito, e menos ainda a um equilíbrio estacionário! Frente à insistência metodológica da teoria ortodoxa na essencialidade do equilíbrio, dificilmente se poderia exagerar a importância deste resultado. Pode-se defini-lo como *uma propriedade dinâmica da economia capitalista associada a uma estrutura estável*: a de que este sistema econômico é *dinamicamente instável*⁵⁰. De certo modo, é como se, *não* se tendo introduzido o *equilíbrio* pela porta de entrada (como pressuposto metodológico, no formato neoclássico), *ele não mais retorne* naturalmente em qualquer outro ponto da análise⁵¹.

⁴⁷ Basta tomar esses mesmos intervalos de valores de μ e assumir, com todos os argumentos do próprio Kalecki, que $\frac{a}{1+c} < 1$, e aplicá-los na condição de flutuações (11) para constatar que ela se cumpre sem dificuldade.

⁴⁸ Isto porque os ciclos longos, ou de tipo Kondratieff, são muito mais controvertidos, e de qualquer forma dificilmente se submeteriam a uma explicação baseada apenas nos efeitos de demanda efetiva analisados por Kalecki e pelos modelos noe-keynesianos, mas requereriam a introdução de progresso técnico e mudanças estruturais, ao estilo de Schumpeter.

⁴⁹ Que talvez por isso tenha se insurgido agressivamente contra os modelos que chamou de *perpetuum mobile*, referindo-se implicitamente a Kalecki e possivelmente a Frisch, como se fossem algo como “efeitos sem causa”: ver SCHUMPETER (1942), cap. 4, p. 139. Aqui há um mal-entendido: a “causa” do ciclo em Kalecki é evidentemente *estrutural*, ao estilo dos modelos físicos de oscilações, e não uma causa “eficiente” ou *ad hoc*, como em Schumpeter, para o qual “cada ciclo é um ciclo” e tem uma “causa” historicamente determinada.

⁵⁰ Ver a respeito VERCELLI (1991), cap. 3.

⁵¹ Há quem tenha se dado ao trabalho de fazer uma varredura deste livro de Kalecki, constatando que, sintomaticamente, *não* é feita em *todo* o livro *uma única referência* à noção de equilíbrio! A única explicação é que Kalecki não era um economista...

(iii) Uma *segunda conclusão teórica central* do modelo de Kalecki é que a dinâmica da economia capitalista pode ser concebida essencialmente como formada por *dois* componentes *teoricamente* distintos – ou seja, não apenas por um recurso expositivo ou analítico: o componente associado à atuação da “*demanda efetiva*”, isto é, do comportamento do nível corrente de atividade, capaz de produzir (ainda que não necessariamente – depende dos parâmetros) *flutuações*; e o componente de tendência associado à *mudança estrutural*, derivado da atuação dos “fatores de desenvolvimento”, especialmente as inovações em geral e o progresso técnico em particular, que certamente são *endógenos* à economia (ainda que *exógenos* ao modelo) e que produzem trajetórias potencialmente instáveis do ponto de vista estrutural, devido à *mudança estrutural* (de parâmetros, do ponto de vista formal) que eles ensejam⁵².

Claro que a forma particular dessas trajetórias não é pré-determinada: dependendo de parâmetros e de hipóteses exógenas de mudança estrutural, o componente de “demanda efetiva” pode não apresentar flutuações, enquanto o “de tendência” pode apresentar-se como uma “onda longa”, do tipo Kondratieff ou semelhante. O que importa aqui não é a forma particular da trajetória gerada, mas o *princípio causal distinto* de atuação desses componentes.

A *combinação* dos dois componentes produzirá, finalmente, uma trajetória dinâmica *integrada*, ainda que as causas específicas não possam ser estritamente unificadas por um princípio causal único ou comum⁵³. Essa combinação se dá na forma de soma dos efeitos apenas sob a condição simplificada (assumida inicialmente por Kalecki mas que pode ser relaxada) de que a equação dinâmica a diferenças seja linear e, principalmente, que o termo independente só varie a “longo prazo”, o que é claramente uma hipótese pouco realista. Caso contrário, relaxadas as simplificações, o modelo passa a envolver uma interação efetiva, mais complexa, entre os componentes, o que entretanto não introduz problemas conceituais adicionais⁵⁴.

Ao interpretar a trajetória dinâmica resultante dessa forma, o destaque está sendo dado menos para aquilo que foi objeto central de Kalecki nesse livro (Teoria da Dinâmica Econômica) e ao longo da sua obra macroeconômica, a saber, os efeitos dinâmicos da demanda efetiva, e mais para o caráter *combinado* e eventualmente *complexo* (envolvendo interações) dessa trajetória, cuja causalidade é, como o próprio autor reconheceu, *necessariamente múltipla*. Que ele tenha dedicado apenas dois capítulos do livro (14 e 15) ao “desenvolvimento”, vale dizer, à “tendência a longo prazo”, e assim os tenha tratado

⁵² Para o conceito de instabilidade estrutural veja-se VERCELLI (1991), cap. 4.

⁵³ Esse tipo de questão – da “integração” entre ciclo e tendência – gerou polêmica na época, da qual o próprio Kalecki participou em boa medida. A meu ver, e curiosamente malgrado a opinião do próprio autor, seu modelo de 1954 já resolvera o problema – de certo modo, mostrando que não havia problema a ser resolvido. De um lado, a necessidade de uma “teoria unificada” é uma quimera sem maior significado, pois afinal o investimento é um só, movido seja pela lógica de acumulação explicada por Marx, seja em nível mais analítico pela teoria da aplicação de capital de Keynes; trata-se apenas de reconhecer que os *motivos* associados à ampliação de capacidade produtiva (investimento “induzido”) e à modernização tecnológica dos equipamentos (investimento “autônomo”) seguem explicações causais distintas. De outro lado, o requisito de integração analítica ou modelística pode ser satisfeito sem maiores dificuldades conceituais, apenas com algum grau de complexidade técnica no caso de se relaxar as hipóteses simplificadoras de linearidade e tendência constante, e mesmo assim apenas para efeito de desenvolver aplicações do modelo. O próprio Kalecki esboçou um tratamento matemático dessa interação no seu cap. 14, bem como no modelo de 1968.

⁵⁴ As trajetórias resultantes em condições mais complexas de interação podem ser obtidas, sob hipóteses específicas de comportamento dos componentes autônomos de demanda agregada e dos parâmetros, por meio de simulações.

analiticamente como exógenos, em nada muda a conclusão, *essencial*, que sua teoria do ciclo se incumbiu de revelar mais claramente que qualquer outra: *na ausência desses fatores de desenvolvimento*, a economia capitalista *não* apresentaria *tendência* positiva – uma das marcas históricas mais importantes do capitalismo -, e portanto mostraria uma trajetória de *flutuações em torno do estado estacionário*! Dificilmente se encontraria maior elogio à importância crucial do progresso técnico em um autor que dele praticamente não tratou, e que não raro foi acusado de tê-lo negligenciado completamente... Schumpeter não teria feito melhor.

5. Conclusões

Neste ensaio procurei mostrar sucintamente a importância e a atualidade da contribuição de Kalecki para alguns dos temas centrais da Teoria Macroeconômica: o princípio da demanda efetiva, a relação poupança-investimento e a dinâmica macroeconômica, que estiveram presentes nada menos que na fundação da disciplina, e foram coerentemente objeto da preocupação contínua deste autor até o fim de sua vida.

A importância de sua contribuição deriva da clareza de pensamento e profundidade de análise, que torna suas proposições e seus *insights* mais básicos verdadeiros marcos de referência para a teoria macroeconômica; muito embora a excessiva concisão e alguma curiosa mistura de teoria com proposições *ad hoc* em seus modelos possam às vezes dificultar a compreensão do que é essencial.

Quanto à atualidade, não é preciso muito esforço para perceber que em todos esses grandes temas a Macroeconomia contemporânea, mais do que nunca dominada pelo conservadorismo mental (além do político), pouco tem a dizer, por tê-los abandonado há muito. E, quando diz alguma coisa – como no caso das banalidades habituais sobre a poupança, inclusive lhe atribuindo um papel descabido como fator de crescimento e desenvolvimento econômico –, é no sentido inverso, de retorno a conceitos pré-Keynes e pré-Kalecki. Ou ainda, como no campo da dinâmica macroeconômica, afastando-se totalmente do primado da demanda, derivado logicamente do princípio da demanda efetiva, e centrando-se metodologicamente no conceito de equilíbrio, abandonado por Kalecki.

O retorno a Kalecki não deve ser, portanto, um simples aceno de reconhecimento e justiça a um grande pensador econômico pouco difundido e precocemente esquecido; mas um gesto de sobrevivência crítica, e *portanto* científica, de uma disciplina essencial para a vida social e para a ação pública no capitalismo, mas que se esvai em perda de substância científica e falta de rumo ao mesmo tempo em que se infla de saber convencional.

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**KALECKI AND THE KALECKIANS:
THE RELEVANCE OF KALECKI TODAY**

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1. Introduction

Klein (1951: 447) wrote that Kalecki “actually created a system that contains everything of importance in the Keynesian system, in addition to other contributions”. Robinson (1979:187) opined that Kalecki’s claim to the priority of publication [over Keynes] is indisputable and that “in several respects, Kalecki’s version is more robust than Keynes’s”, a claim she repeated several times.¹ Johnson (1973), reviewing Kalecki’s (1971) selected papers, stated that the “blurb ranks Kalecki with Keynes. Technically he was far superior, and his contributions during this period in England probably did more to shape the evolution of Keynesian theorizing over the next decade than those of any other young Keynesian.” These accolades suggest that Kalecki was being recognized - alongside Keynes - as one of the leading contributors to modern macroeconomics.

But history has not been kind to Kalecki who, in Harcourt’s (1975) words, is “the most neglected of all great modern economists”. Among the mainstream of the profession Kalecki’s name is hardly mentioned at all, and it is fair to say that the great majority of economists have never heard his name.² It is only among post-Keynesian and radical economists, who comprise a minority in the profession, that the interest in Kalecki’s work has increased. Indeed, Kalecki’s economics seems to play a central role in the development of post-Keynesian economics (see Arestis, 1996).³ Aside from the fact that this interest is confined to a relatively small number, a large part of this work is merely repetition of the master’s work sometimes interspersed with the commentary and interpretation, or comparison of Kalecki with other masters, usually Marx and Keynes. While this can popularize and clarify Kalecki’s work, the absence of a more vibrant and creative influence could arguably be considered a fate worse than neglect. There has also been some criticism of Kalecki and the Kaleckians within broadly post-Keynesian circles.

Against this background, and on the occasion of Kalecki's birth centenary, this paper examines Kalecki's relevance today. It argues, by briefly examining the work of Kalecki and those who draw inspiration from the work of Kalecki (and who will therefore be called Kaleckians), and by discussing some criticisms of Kalecki and the Kaleckians, that Kalecki's work remains highly relevant today. This paper will concentrate on Kalecki's and Kaleckian writings on the advanced capitalist economy, and not discuss his other work on socialist economies and developing economies, although the relevance of his work on the advanced economy for developing economies will be discussed. The discussion is not intended to show how the model explains specific issues of contemporary reality;⁴ it instead explores theoretical issues which appear to be of current relevance. In examining these issues the paper also attempts to provide a critical survey of some of the major recent contributions to the Kaleckian literature.⁵

The rest of this paper proceeds as follows. Section 2 provides a brief overview of Kalecki's contributions with a view to singling out his central contributions. Section 3 provides a brief survey of work inspired by, and drawing on, Kalecki's central contributions. Section 4 turns to implicit and explicit criticisms of the work of Kalecki and the Kaleckians and assesses them. Section 5 concludes with a brief summary and brief comments on the relevance of Kalecki's and Kaleckian work.

2. Kalecki's central contributions

To identify Kalecki's central contribution to the analysis of capitalist economies we briefly review his work on pricing, income distribution, profit and income determination, financial issues, inflation, investment, business cycles, growth and government policies.⁶ To actually identify his central contributions we use the following criteria: *either* that it should be a recurrent theme in his writings, *or* that his writings should reflect a gradual development towards it, and not one that

appears sporadically, to be omitted or altered in other contributions; *and* that it should play a role in his overall formal analytical apparatus.

2.1 Pricing

After first discussion the case of a freely competitive industry with a U-shaped cost curve (see Osiatynski, 1992), Kalecki devoted the rest of his career analyzing pricing behavior in oligopolistic industries. He distinguished between sectors (mainly producing raw materials) with short-run supply limitation for which prices were demand determined, and oligopolistic industries sectors producing industrial goods. In the latter sector firms in which normally operated with excess capacity, Kalecki assumed to have constant marginal or prime costs up to the level of full capacity after which it increased or became vertical. Firms set price according to

$$P = \mu c$$

where P is the price, $\mu > 1$ representing the degree of monopoly,⁷ and c is the constant unit prime cost. Kalecki usually took labor and raw materials to be the variable inputs (and user cost in some versions), but did not formally incorporate the determination of the (demand determined) price of materials in his analysis. For simplicity, we follow Asimakopoulos (1975) and assume that labor is the only variable input; the above equation then becomes

$$P = \mu W a$$

(1)

where W is the money wage rate and a . This is the pricing assumption for the economy as a whole. This basic markup pricing approach persists in Kalecki's writing on pricing. However, Kalecki's writings on pricing also reveal many changes over time, as documented in detail by Kriesler (1987), who distinguishes between three phases. There are three main areas of change.

The first relates to the justification and explanation of the markup pricing equation. In the early phase of his writing, in which Kalecki (1938, 1939) focused on the individual firm without an explicit consideration of its economic environment and its interactions with other firms, the relationship between price and prime costs is just assumed to be given by the degree of monopoly, a procedure that led to some criticisms that Kalecki approach was guilty of tautology.⁸ In the next phase, Kalecki (1939-40) and (1942a), attempting to relate his analysis to the then-developing theory of oligopoly theory, introduces the demand curve of the firm and proceeds in terms of concepts of elasticity of demand and marginal revenue, taking into account the interdependence of pricing decisions of firms. But, as Kriesler (1987) points out, there appear to be some errors in Kalecki's formulation, and he abandons this approach in his later work. In this later work Kalecki (1954, 1971b) continues to stress the interdependence of the pricing decisions of firms in an oligopolistic setting by starting with an equation which states that the price charged by a firm depends on its prime costs and the price charged by other firms, but states that "[i]n view of the uncertainties faced in the process of price fixing ... [it cannot be assumed] that the firm attempts to maximize its profits in any precise manner ... In fixing the price the firm takes into consideration its average prime costs and the prices of other firms producing similar products" (Kalecki, 1954: 12). The middle phase can therefore be thought of as a detour, the result of his attempt (perhaps in response to prodding by others) to relate his approach to recent developments in oligopoly theory of the time.

The second area relates to the precise determinants of the markup. In the early phase he is not very explicit, apart from a discussion of ambiguous forces at work over the business cycle. Kalecki (1939a) goes against the prevalent notion that the degree of monopoly rises during the boom and decreases during a depression, because during depressions cartels form to protect

profits, because during depressions firms wish not to go into competitive price reductions, and finally, because there is little fear of the entry of new competitors. After a second phase in which the role of the elasticity of demand becomes evident (though he resisted a simple determination of the markup by the latter, especially in the case of oligopoly), Kalecki's analysis of the determinants of the markup becomes richer (1954, 1971b). The markup depended positively on the degree of concentration in industry, the extent of sales promotion and non-price competition, and the size of overheads relative to prime costs (which had to be covered from markup income) and negatively on the power of trade unions. In the long run, technological change could also change the markups (Kalecki, 1954: 19).

The third area concerns the issue of aggregation over firms and industries. After early phases in which Kalecki works in terms of average markups without dealing with aggregation issues at any length, he later devoted a great deal of attention to aggregation issues: his presentations start at the level of the individual firm, then aggregate it to industries and finally to the economy as a whole. This implies that the markup in industries and the economy as a whole are affected by changes in the composition of output across firms and industries which cannot in general be assumed to be given; thus the aggregate markup is not a constant (Osiatynski, 1992). Kalecki also faced many unresolved problems having to do with the definition of the industry (Kriesler, 1987). However, problems of this kind - which are clearly of great importance in empirical work - can be swept aside by adopting the device of the representative firm, or with the assumption that all firms are identical.

2.2 Income distribution

The wage share in national income, using equation (1), is given by

$$= 1/\mu, \tag{2}$$

which Kalecki's basic result that the distribution of income is determined by the degree of monopoly. If the latter is constant, the wage and profit shares in real income are constant. Kalecki argues that this theory holds not only for the short run but also for the long as long as the degree of monopoly is unaltered and the economy does not reach full capacity utilization (Kalecki, 1938: 105), which Kalecki clearly thinks not to be a necessary outcome.

Since Kalecki also normally took into account materials as a variable input, his wage share equation also involved the ratio of materials costs to wage costs, which we denote by m , so that we need to replace equation (2) by

$$= 1/[\mu(1+m)].$$

As Kalecki notes, in this case an increase in the markup may not reduce the wage share if it is accompanied by a fall in the materials to wages ratio. Even for this case, however, in his analytical models Kalecki generally assumes to be independent of the real income. In Kalecki (1954), however, he makes the distribution of income depend explicitly on the level of output, where writes the wage and salary bill as

$$V = Y + S,$$

which implies a wage and salary share

$$= (Y + S)/Y. \quad (3)$$

This is rationalized by assuming that salaries (paid to overhead labor) are paid out of markup income, in which case $S = \mu Y$ and salaries a constant real amount, $S = \mu Y$.

2.3 Profit and income determination

Though Kalecki did not express it in this way, his basic approach to the determination of real output and income is summarized by the equilibrium condition

$$Y = C + I, \quad (4)$$

where Y denotes real output and income, C real consumption and I real investment. The equalization of the two sides of the equation is assumed to be achieved through variations of real output and income since, as discussed above, firms maintain excess capacity and change production rather than price to meet changes in demand.

Aggregate consumption is the sum of consumption by workers, which we denote by C_W , and consumption by capitalists, C_C , so that

$$C = C_W + C_C. \quad (5)$$

Kalecki assumed that workers spend what they earn on consumption, so that

$$C_W = W, \quad (6)$$

where W is the real wage bill. Capitalists, who receive real profits π , save and consume, so that

$$C_C + S = \pi, \quad (7)$$

where S is real saving by capitalists (which includes savings done directly by firms). Since total income goes to workers or to capitalists as profit, we have

$$Y = W + \pi. \quad (8)$$

Substituting equation (5), (6) and (8) into (4) we obtain

$$Y = C_C + I, \quad (9)$$

which yields Kalecki's famous expression that capitalists earn what they spend (on consumption and on investment, if these can be taken to be autonomous) in contrast to workers who, as mentioned above, spend what they earn.

Kalecki assumed that current investment is given by past decisions, so that I is exogenous. Regarding the determinants of capitalist consumption he altered his views over time, sometimes taking it to be given, dependent on past profits, and sometimes (as in Kalecki, 1935), taking it as a function of current profits. If we assume, for simplicity, that capitalist consumption is a linear function of total profits, so that

$$C_c = C_0 + (1-s_c)Y, \quad (10)$$

where s_c is the marginal propensity to save out profit and C_0 is autonomous consumption by capitalists, we get, by substituting equation (10) into (9), that

$$Y = (C_0 + I) / s_c. \quad (11)$$

Since by definition, we have

$$I = (1-\mu)Y,$$

equations (3) and (11) in combination yield

$$Y = [\mu/(\mu-1)] (C_0 + I) / s_c, \quad (12)$$

which determines the equilibrium level of output and income.

Kalecki considers a number of variations in this model in different contributions, but maintains this basic form in most. He occasionally allows the profit share to vary, as in equation (3) in which equation (12) has to be modified to

$$Y = [\mu/(\mu-1)] \{[(C_0+I)/s_c]^+\}.$$

In a 1934 paper he extends his analysis to incorporate foreign trade to examine the stimulating effects of a rise in net exports (see Kalecki, 1971a). He discusses the effects of government fiscal activity in Kalecki (1937), on which more below. In some presentations Kalecki (1942c, 1943, 1969) uses three-sector Marxian schemes to present his theory of effective demand, the three sectors producing investment goods, consumption goods for workers and consumption goods for capitalists. However, these schemes assume that relative prices are given across sectors, and do not add much substance to his one-sector analysis.

2.4 Financial issues

Kalecki (1954, 1971) examines three financial assets: money, short-term bills and long-term loans. Money supply is endogenously determined by the demand for credit which responds to the needs of trade. But as more money is supplied for investment and other needs the short-term interest rate is increased by banks to compensate their higher risks. The long-term rate is related to the short term rate, although Kalecki opines that the latter changes little over the business cycle. Despite the fact that Kalecki discussed these ideas, he did not incorporate the asset market explicitly into his macroeconomic model, which instead focused on the real side. One aspect that he does incorporate is the principle of increasing risk, which is discussed below.

2.5 Inflation

Kalecki analyzes the effects of increases in wages and prices in terms of a wage-price spiral. Kalecki (1971: 7) writes that “[t]he existence of high mark-ups will encourage trade unions to bargain for higher wages, since they know that firms can ‘afford’ to pay them. If their demands are granted ... prices will also increase”. However, Kalecki did not develop a formal theory of inflation based on this approach; nor did he incorporate inflation into his formal analysis.

2.6 *Investment*

More than any other aspect of Kalecki's work, his theory of investment went through major changes over time. Steindl (1981) distinguishes between three versions: the first developed in the 1930s (Kalecki, 1935, 1937), the second developed in the 1940s and 1950s (Kalecki, 1943, 1954), and the third in the 1960s (Kalecki, 1968).⁹ Two aspects to Kalecki's treatment of investment are present in all these versions, one relating to time lags in investment and the other to the more important issue concerning the determinants of investment plans.

Concerning time lags, Kalecki consistently recognized that there were delays between investment plans and their implementation. The first version Kalecki distinguishes between three concepts of investment: the production of investment goods, investment decisions and orders, and deliveries of plant and equipment. The production of investment goods is a moving average of investment decisions (and orders) over the period of gestation of investment goods, which is exogenously given. Deliveries of finished investment goods, or plant and equipment, follow orders with the same time lag. The two subsequent versions do not distinguish between the production and delivery of investment goods, and assume that both follow investment decisions with an exogenously given time lag.

Turning next to the determinants of investment plans, Kalecki introduces different factors into linear investment plans function. A factor he consistently stresses is profitability. Version 1 assumes that investment plans as a ratio of capital stock is a positive function of the current rate of profit, which measures expected future profitability, with a negative intercept. Version 2 replaces the profit rate as the sole determinant with two separate determinants related to it: financial resources available to the firm, and marketing prospects. Financial resources are represented by the level of savings of the economy, and the marginal propensity to investment out

of saving is less than one since business savings (which represents new financial resources for the firm) is only a part of total saving, and since firms generally resort to “incomplete re-investment” of their savings. The incorporation of internal financial resources is explained by Kalecki in terms of the “principle of increasing risk”, according to which risk increases with the amount invested out of borrowed funds so that investment will be greater as the amount of internal funds increases. Internal funds may also make it easier for the firm to borrow and thereby increasing investment. Marketing prospects of the firm are represented by the current change in profits (Kalecki apparent believes the level of the profit rate is too simplistic) reflecting increasing sales, which has a positive impact on investment, and by changes in the stock of capital which has a negative effect on investment since it represents greater competition and hence more claims on available profits. Version 3, while continuing to stress savings and profitability factors, distinguishes between the returns on new capital (embodying new, efficient production methods) which affect investment decisions and the returns on old capital. Old capital retains some of its earlier markets and profits due to imperfections in competition, but new capital makes inroads due to its productivity advantage, which is assumed to be exogenously given.

In addition to profitability, in his different presentation Kalecki assumed that desired investment depends on a number of other factors. Technological change begins to play an increasing role starting from version 2, where a constant positive term is added to the investment function representing it; in Kalecki (1954) the its effect is taken to be proportional to capital stock and depreciation which is in turn proportional to capital stock. In version 3, in addition to technological change providing the stimulus incorporated into the earlier version, Kalecki tries to integrate this analysis with his theory of the distribution of profits: technological change increases the real cost of running old machines and their lower profits are transferred to new machines, the

amount transferred depending on labor costs. A second factor which occasionally plays a role is the interest rate. In version 1 investment plans as a ratio of capital stock depended on the nominal rate of interest (as well as the rate of profit), but its role is eliminated by making it vary proportionately with general business conditions proxied by the rate of profit. In subsequent versions it is not considered a major determinant. Kalecki argued that given the importance of internal funds, the cost of borrowed funds is not very important. Moreover, the long-term rate (which could affect investment) changed little over the cycle, and when it did it moved with the rate of profit, which countered any effects. Finally, the size of capital stock is at times assumed to play a role. In version 1 the negative intercept term in investment-capital ratio equation implied that capital stock negatively affects investment. However, in version 2 the size of the capital stock implies more rapid technological change, positively affecting investment. In one version the size of capital stock is also argued to make it easier for the firm to borrow, thereby increasing investment. (Kalecki, 1971: 106).

2.7 Business cycle

Corresponding to the three theories of investment discussed above, Kalecki's theory of the business cycle also went through three theories of the cycle (see also Sawyer, 1996), the other components of the theories being more or less the same.

In version 1, the investment function makes investment plans depend positively on the level of profit and negatively on the stock of capital. Given the lag in investment, the cycle occurs due to the interaction between profit and the stock of capital. High profits encourage investment plans which eventually leads to the accumulation of capital, which lowers investment plans in the future. This negative effect of capital accumulation on investment decisions is downgraded in version 2, since Kalecki argues that the stock of capital fluctuates rather moderately over the

course of the cycle. Though he stresses the role of incomplete re-investment of saving in bringing the upswing to an end, however, he continues to insist on the importance of the negative feedback of the accumulation of capital. Version 3, which distinguishes between returns to old and new capital, works in a manner analogous to version 1, with the difference that investment is now affected by changes in the profit on new capital alone, rather than on changes in total profits; since old capital retains a large part of the profits due to imperfect competition, the decline in the profit for new capital following capital accumulation is greater than in that version. Since this version also concentrates on marginal profits, however, this version results in a dynamic equation having same form as version 2 (Steindl, 1981).

Mathematically, the business cycle is explained in terms of linear difference (versions 2 and 3) or mixed differential-difference equations (version 1). They result in perceptual cycles only with certain parameters values; otherwise they result perceptual explosion on convergence to a steady growth path. Kalecki mentions that some of the parameters of his investment functions do change over the cycle (see below), but the effects these nonlinearities is not formally examined by him.

2.8 *Growth*

Kalecki's analysis of macroeconomic dynamics is conducted in terms of cycles and not in terms of equilibrium growth rates. However, Kalecki's later models which have a growing trend yield a quadratic equation when the condition of a constant growth rate is imposed (see Gomulka et al, 1990, Sawyer, 1996). Kalecki confines attention to what he conjectures to be the stable solutions and finds that the determinants of the equilibrium growth rate in his models are the parameters of the investment function (including the coefficients on the savings term and the past investment term), the propensity to save of the capitalists, and the parameter representing the stimulative

effects of technological change (see Kalecki, 1962). Kalecki made heavy weather of the fact that outside stimuli provided the source of growth in his model, that stimulus being provided by technological change in his models. He came to this conclusion because his earlier models which did not have a growing trend due to technological change ended up in a stationary equilibrium (if stable) without positive net investment while his later models incorporated such a trend because of technological change. However, technological change, which he interpreted in a broad Schumpeterian sense to include new products, and opening up new sources of raw materials (see Kalecki, 1991, 334), did not stimulate the economy by raising the productivity of labor from the supply side, but by providing a boost to investment plans. In Kalecki's models growth is determined by demand-side factors, since the economy is not supply constrained in his models, even at the peak of the cycle.

2.9 Government policies

Kalecki (1944) discussed a number of ways by which government policy could be used to reduce unemployment by increasing aggregate demand: by increasing government spending on public investment and subsidies to consumption financed by borrowing; by stimulating private investment; and by redistributing income from low to high income groups who had lower propensities to consume. While these policies make eminent sense in terms of his formal framework, Kalecki (1943) also took into account the political obstacles to achieving full employment due to the "power of vested interests". According to Kalecki, capitalists and other dominant classes could oppose these policies even if they increased their profits because: they could see increased government involvement in the economy and be seen as a threat to their autonomy; because of "moral" reasons such as not spending beyond one's means, the need for sound finance, and for earning ones' living rather than receiving assistance from others: rentiers

would be against any possibilities of inflationary pressures; and the captains of industry would not appreciate a fall in worker discipline resulting from low rates of unemployment.

2.10 Concluding remarks

Applying the above-mentioned criteria to Kalecki's writings it appears that Kalecki's central contributions are in the areas of pricing, distribution and effective demand. In his introduction to posthumously published collection of his essays Kalecki (1971, vii) writes that "the theory of effective demand, already clearly formulated in the first papers, remains unchanged in all the relevant writings, as do my views on the distribution of income". Though his theory of pricing changed somewhat, its revealed continuity regarding the basic themes. We have summarized these aspects of his work in the equations present above.

Kalecki's theory of financial issues and inflation, although insightful, were sketchy and not incorporated into his theoretical apparatus. His theory of investment, and hence his theory of cycles, underwent considerable changes over time. There were certain recurring features, such as the emphasis on lags and on profitability in investment, and there was a steady progression concerning the importance of technological change. However, the precise formulations changed too much over the years, suggesting Kalecki's own dissatisfaction with them; in fact he considered his business cycles models to be rather mechanistic. His formal analysis of growth, based on the business cycle model equations, suffer from similar problems. His analysis of investment, cycles and growth were certainly rich and novel, but his main contributions here arguably lie in his conceptual contributions rather than in his analytical contributions that fit into a theoretical model that can be said to include his central contributions. Finally, his contributions in the realm of political economy, and their close relationship to his formal theory, also appear to be a central feature of his work, though not to his analytical apparatus.

My identification of Kalecki's central contributions being his theory of prices, distribution and effective demand appears to be at odds with most interpretations. Kalecki's writings have been interpreted by most commentators to be centered around his theory of cycles (see Sawyer, 1985, Patinkin, 1989, for instance). However, it is in agreement with Sebastiani (1994) who also argues that Kalecki's major contribution is to stress the theory of effective demand based on his approach to pricing and distribution. There is certainly no doubt that Kalecki main interest lay in his theory of cyclical growth. This is evident in the titles of his papers and books, and in their organization. Pricing, distribution, and effective demand seem to be mere building blocks to his analysis of cycles. But there is a difference between what interested him most and what his central contributions are. Of course, my criteria for locating key contributions may be found wanting. However, I will argue later those that I have identified as Kalecki's key contributions using them are also ones that have stood the test of time in the sense of withstanding criticism adequately and in serving as the basis for further work.

There remains the problem that what I have identified as Kalecki's central contributions appear to be at odds with his own methodological ideas about equilibrium and economic dynamics. I have expressed his central contributions in terms of an equilibrium model of demand determined output. Sawyer (1985: 5-6), however, writes that "Kalecki made little use of (and was even hostile to) that major tool of analysis in neo-classical economics, namely equilibrium analysis. ... Kalecki viewed the capitalist economies as inherently cyclical ... Thus, for Kalecki there is no short run equilibrium position to be analyzed nor is there any long-run equilibrium to which the economy will tend". Sawyer even goes on to argue that the equality between saving and investment which Kalecki (1937a) referred to as an equilibrium should not be thought of as an equilibrium condition equating ex ante saving and investment. Sawyer's claim, however,

obscures the fact that Kalecki did analyze a short-run equilibrium in which supply came into balance with demand in the goods market through variations in real output. The fact that this equilibrium need not equate saving to ex ante (desired) investment is because time lags prevent investment plans from being fulfilled immediately and translated into effective demand. The central point is that equilibrium should not be thought of as an actual state of rest but rather as a theoretical tool of analysis. Kalecki himself was probably obsessed with cyclical behavior in his models because he took the capitalist economy to be inherently unstable. But the equilibrium in a model does not imply a position of rest for actual economies, since in the model many things which can actually change over time are held constant in order to abstract from their influences. If these things change erratically, they need not be modeled formally. But if they do change systematically, the equilibrium model can be the basis of examining the results of the endogenous dynamics of these state variables.

3. Kalecki and the Kaleckians

This section selective examines the work of the Kaleckians in evaluating and building upon Kalecki's work, mainly in theoretical terms, but also (albeit even more selectively) in empirical terms. I will follow the structure of the previous section with the differences that I will discuss investment earlier, and discuss a few issues not present (at least in a major way) in Kalecki's own work.

3.1 Pricing

Kalecki's approach to pricing has come to play a major role in modern economics. His distinction between fixprice and flexprice sectors has been many, including Hicks (1974). The fixprice interpretation that has been given to Keynes's treatment of the goods market more appropriately applies to Kalecki, since Keynes's goods market was a flexprice, competitive, one. Kalecki's

markup pricing theory has also become a standard feature of modern macroeconomics, with mainstream texts such as Dornbusch and Fischer (1978) incorporating it (who do so without mentioning Kalecki), and with a large literature supporting it empirically and using it as a component in empirical models.¹⁰

Kaleckian contributions have not only sought to support Kalecki's ideas about the determinants of markups empirically (see Reynolds, 1987:80-81), but also provided new theoretical interpretations of it. Cowling (1982) and Cowling and Waterson (1976) provide optimizing underpinnings of markup pricing by assuming that each firm maximizes profits, but taking into account the expected reactions of each firm's rivals. The analysis implies that the markup in an industry depends on the price elasticity of demand for the industry's product, industrial concentration, and expected responses by firms. Sen and Dutt (1995) extends this approach to incorporate trade union behavior as well, thereby incorporating Kalecki's ideas on the class struggle within an optimizing framework. The employer is assumed to negotiate with its union using the Nash bargaining framework, and each firm behaves like an oligopolist in the product market. This partial equilibrium approach has been extended to a Kaleckian general equilibrium framework in Dutt and Sen (1997) in which firms are assumed to compete in a monopolistically competitive economy with product differentiation.

Another set of contributions extends Kalecki's views on the determinants of markups by incorporating new factors. Some stress the dependence of pricing and investment decisions. Since (as Kalecki argued) internal funds are a major source of finance for investment and because internal funds affect the access to, and willingness to use, external funds, the firms' desire to increase investment can lead them to increase their markups to generate for internal saving. Variants of this analysis, which integrate the pricing and investment decision, have been made by

Ball (1964), Eichner (1973, 1976), Wood (1975), and Harcourt and Kenyon (1976). Other contributions introduce target return considerations into the determination of the markup (see Lavoie, 1992).

3.2 Income distribution

Kalecki's theory of distribution has been recognized as a major contribution from very early on. Kaldor's (1955-56) paper on alternative theories of distribution places Kalecki's approach on par with that of Ricardo, Marx and Keynes. Scitovsky (1952) described Kalecki's theory as "the best and most interesting attempt at a theory of income distribution under restricted competition".

Kalecki's approach to income distribution can be compared to the other influential approach within the post-Keynesian tradition. Kaldor's (1955-56) approach is similar to Kalecki's in having different propensities to save out of wage and profit income and in having firms making investment decisions which are independent of savings decisions. However, in Kaldor's approach income distribution varies and is determined to bring saving into equality with investment: output is determined at full capacity or full employment, and the price level varies to clear the goods market given the money wage. Thus in Kaldor's formulation an autonomous increase in investment demand increases the price level, reduces the real wage and shifts the distribution of income towards profit. In Kalecki's formulation, on the other hand, an autonomous increase in investment demand increases output and the rate of capacity utilization with no effect on the price level if the markup is unaltered; hence, distribution is determined by forces exogenous to the demand and supply in the goods market (unless they happen to affect the degree of monopoly).

The approaches of Kalecki and Kaldor can obviously be combined in a single model in which at lower levels of demand excess capacity prevails and income distribution is determined in

a Kaleckian manner, and in which if aggregate demand is high and full capacity utilization prevails, distribution is determined in a Kaldorian fashion. For a model in which this possibility is allowed, see Dutt (1992).

Other extensions of Kalecki's approach involve the introduction of new groups such as rentiers who receive interest income (see Dutt, 1994) and overhead labor who receive salaries out of markup income (see Rowthorn, 1981, Lavoie, 1992), and the endogenization of the determinants of the markup (due to for instance, changing conditions in labor markets and goods markets). Some of these extensions imply that the problem of income distribution cannot be examined in isolation from other aspects of the economy, at least in the longer run.

3.3 *Investment*

As noted in the previous section, Kalecki's investment equations changed over its numerous formulations. Some of these version made rather peculiar assumptions which were not present in other formulations. Sordi (1989) raises questions about the statistical significance of the coefficients on saving and the change in capital stock in Kalecki's second version of the investment function using his original equation (not an altered form used by Kalecki) and his data. The lasting contributions of Kalecki's investment theory lie not in his specific formulations and equations, but in the main determinants of investment to which he drew attention, namely, internal finance, market prospects, and technological change, and to the issue of lags.¹¹ A large number of empirical studies provide general support to the factors stressed by Kalecki (see Courvisanos, 1996 for a survey). We consider in turn issues relating to the determinants of investment plans and lags.

In assessing the significance of the changes in Kalecki's investment functions over their different formulations, Steindl (1981) locates two main differences between version 1 and

versions 2 and 3. One difference concerns whether investment is driven by recent changes in the relevant variables such as the change in sales or profits as in the later versions, or by integral values with result from earlier changes, such as the volume of sales and profits as in the earlier one. The later version not only leaves out changes other than the most recent changes in markets and profits, but also has the result of destabilizing the model. In contrast to these problems, however, the later version has the important advantage of taking into account the separate influences of financial resources and the demand for the firm's products. To overcome the problematic aspects of the later versions but retain its positive feature, Steindl (1981) argues that it is more natural to introduce demand considerations more directly, in the form of the degree of utilization of capacity, and suggests an investment function which depends on saving as a ratio of capital stock (to take into account financial considerations, as did Kalecki), and on the deviation of the actual rate of capacity utilization from what he calls "normal or desired utilization". In fact the rate of capacity utilization appears as a determinant of investment in Steindl's (1952) own dynamic model, and has played an important role in subsequent Kalecki-inspired models. For instance, Kaleckian contributions which also incorporate insights from Steindl, such as Rowthorn (1981), Dutt (1984) and Taylor (1983), include both financial and market considerations when they introduce both the rate of capacity utilization and the rate of profit as determinants of the desired rate of capacity utilization. An alternative formulation has been used by Bhaduri and Marglin (1990), in which investment is assumed to depend on expected profitability, which is taken to by investors to depend on its two components, the profit share and the rate of capacity utilization; hence investment as a ratio of capital stock is taken to depend on linearly on the profit share and the rate of capacity utilization.

Turning to other determinants, we saw earlier that although he introduced it in his earliest investment equation, Kalecki thereafter tends to underplay the importance of the interest rate. However, as Arestis (1996: 24) points out, interest rates were low in Kalecki's time, which may explain his neglect of this factor but not justify the same for other periods. Kaleckian contributions such as Taylor (1983) and Dutt (1990) therefore tend to incorporate the interest rate. Regarding the internal financial position of firms, Steindl (1952) explicitly makes investment depend on the gearing ratio of firms, taking into account the firms' profit payout rate, going beyond Kalecki's simplistic approach which took into account the economy's level of savings. Finally, the rate of technological change has become a standard determinant of Kaleckian investment functions, as in Rowthorn (1981), Dutt (1990, 1994), You (1994), and Lima (1997a, 1997b), among others.

We have seen that Kalecki emphasizes that there are time lags between investment plans, the production and delivery of investment goods, and the productive use of new capital. He formalized this by conducting his analysis in terms of discrete time and by using given lag lengths. Aside from the fact that assuming all lags are of the same length, the treatment of time in discrete terms can be criticized for ignoring what happens between the beginning and end points of a time interval (Goodwin, 1989). Perhaps these problems have led many Kaleckians to ignore delays between investment plans and production, but this throws the baby out with the bath-water. A more reasonable formalization, and one which serves to simplify the dynamic analysis, is to conduct the analysis in continuous time and to assume that actual investment or capital accumulation reacts to investment plans slowly (see Dutt, 1999).

3.4 *Financial issues*

Although Kalecki does not formally incorporate financial issues into his work, his writings on this theme have had an influence on subsequent work, especially by post-Keynesian writers (see Arestis, 1996).¹² Kalecki's ideas on the endogenous determination of money is related to the horizontalist view of money supply which is contrasted with the verticalist exogenously-given money supply (see, for instance, Moore, 1988), but is apparently richer in incorporating the notion that the short-term rate increases when money supply expands due to credit expansion, which is closer to Minsky's (1982) approach. Moore's (1988) analysis of the horizontalist view also draws on Kalecki's analysis of pricing of industrial products by applying it to the banks' determination of their lending rate: banks with excess cash reserves are assumed to set their lending rate as a markup on the central bank's discount rate.

Financial considerations have been incorporated into Kaleckian macro models into two main ways. One way is by using the Keynes-Tobin approach in which the interest rate and asset prices change to clear asset markets, and these variables in turn affect real variables. An early formalization, developed in Taylor (1983), uses the IS/LM structure in which the IS side comes from Kalecki and the Kaleckians and the LM side comes from this asset market approach, with the interest rate varying to clear the loan market, where the public chooses between bank deposits and loans to firms. Taylor (1983) also introduces a third asset in the form of gold, with the price of gold entering as an additional variable, which creates the possibility of asset market instability. Taylor (1991) introduces financial instability along Minskyian lines by making desired investment depend on the expected rate of profit, and defining the expected rate of profit as the sum of the current rate of profit and a state variable representing investor confidence. This investor confidence rises (falls) when the real interest rate is low (high). The result is that there may be cyclical fluctuations in confidence, or even instability (see also Taylor and O'Connell, 1985). The

other formulation also uses the Kaleckian real side but uses the post-Keynesian horizontalist approach to money supply, with a constant nominal interest rate. Dutt and Amadeo (1993) pursue this approach. The interest rate not only affects investment plans, but also the markup charged by firms (since interest payments have to be paid out of markup income). In this approach, a rise in the rate of interest can not only reduce investment and accumulation, but also worsen the distribution of income (by increasing the markup) and push up the price level.

3.5 Determination of profit and output

Given the many modifications of the basic Kaleckian approach we have already mentioned (such as the incorporation of the relation between investment and pricing decisions, overhead labor, rentiers, capacity utilization effects on investment, asset market considerations), one would expect there to be many modifications of Kalecki's theory of profit and income determination.

Without going into all of them, let us note one modification, suggested by Kalecki himself, which is to allow saving by workers. Assume that workers do not consume all their income, but save some part of it, denoted by s_w which we assume to be smaller than s_c . In this case we have

$$C_w = (1-s_w) W,$$

so that $P = C_c + I - (W - C_w)$ where the last term denotes worker saving, and equation (9) no longer holds. Moreover, since we now have

$$(13) \quad = [C_0 + I - s_w Y] / (s_c - s_w),$$

we can no longer determine the level of profit independently of the level of income. Nevertheless, given the distribution of income - which in the simplest case is determined by the markup - we can solve for the equilibrium levels of output and profit jointly if the level of investment is exogenously given. Equilibrium output is now given by

$$Y = (C_0 + I) / [s_c + (1/\mu)(s_w - s_c)]. \quad (14)$$

Nothing of substance changes: output is still determined by the same set of factors as before and since

$(s_w - s_c) < 0$, a rise in μ still reduces equilibrium output. We only lose some implications such as 'capitalists earn what they spend' and that profits can be determined independently of distribution.

3.6 *Inflation*

Kalecki's suggestions on the determinants of inflation as reflecting the conflict between workers and firms have been used as the basis of a theory of inflation in a number of contributions (see Arestis, 1992, Dutt, 1990, 1992). In Dutt (1990) the change in the money wage is assumed to depend on the gap between targeted or desired real wages of workers or unions and the change in the price level is assumed to depend on the gap between the targeted markup of firms and the actual markup (which, given the inverse relation between, depends on the gap between the real wage targeted by firms - based on their targeted markup - and the actual real wage). For given targets of firms and workers, this approach determines the rate of inflation and the real wage. The analysis can be modified to take into account inflation expectations and rates of profit as determinants of money wage changes. Moreover, the target real wages of firms and workers can also be endogenized to make them depend on goods market and labor market considerations, as we shall discuss below.

One interesting implication of this approach is that monetary contraction can be stagflationary and distributionally regressive, as opposed to the anti-inflationary effects expected by monetarists (see Dutt, 1990, for details). Taking the horizontalist view of money supply, if the central bank applies a monetary brake and raises the rate of interest, this will increase the markup

targeted by firms and hence reduce the real wage targeted by them. This induces firms to increase the price level at a higher rate, which results in a higher equilibrium rate of inflation and a lower real wage. The lower real wage and the negative impact on investment results in a fall in demand and output.

3.7 *Cycles*

Some of the work based on Kalecki's own exposition of the cycle has examined the mathematical properties of his models to find conditions for cycles and for stability. The early work of Frisch and Holme (1935) analyzed the case of the early difference-differential equation framework while Sordi (1989) and Gomulka et. al (1990) consider the later difference equation version. The latter contribution derives stability conditions both for Kalecki's own model and for a modified version which takes into account the effect of technological change on the trend rate of growth in an appropriate manner rather than taking that trend rate to be given exogenously.

Kalecki's own formulations have yielded little else. In fact, his models have been subject to some criticism. Velupillai (1997) argues that the mixed differential-difference equation formulation found in the first version follows from some strange assumptions according to which the production of investment goods is taken to depend on the integral of past investment orders, rather than on their sum, and because capital stock is differentiated and not differenced in deriving changes in the stock of capital. Goodwin (1989) has asked why one should rely on discrete time models, since they in effect assume that nothing happens between times t and $t+1$. This difference equation structure of the later versions is the result of mechanical assumptions about investment lags, as mentioned above.

In Kalecki's models (as in other similar linear models such as the multiplier-accelerator interaction model) recurrent cycles are generated only by specific values of parameters, for which

Kalecki was criticized early on by Frisch (see Goodwin, 1989). Perpetual non-explosive cycles require recurrent exogenous shocks (in the case of damped cycles) or exogenous floors and ceilings (in the case of explosive cycles). Kalecki (1954) was not enamored with either of these approaches, the former because even though exogenous shocks could produce roughly regular cycles the dynamics would be determined mainly by the shocks rather than the dynamics of the cycle, and the latter because he could not find evidence that the economy hit some full employment ceiling during the boom (see Sawyer, 1996: 97). In any case, cycle theories using this linear difference equation structure have given way to non-linear models of cycles which use the Poincare-Bendixson theorem or discrete time chaotic models (see Goodwin, 1989). Some of Kalecki's models contain the seeds of nonlinearities. For instance, version 1, as noted above, introduced the interest rate as a variable in the investment function, but by taking it to be a function of the rate of profit and by linearizing the function, the nonlinearities are abstracted from; nonlinearities which increase the interest rate during the expansionary phase of the cycle can be used to model Kaleckian ideas about financial constraints. In version 2, Kalecki (1943) states that the coefficient of the change in profit term changes over the cycle, for instance due to changes in the price of investment goods; the coefficient of the change in capital stock could also be a variable. The former coefficient was seen by Kalecki to play an important role in the business cycle: at the beginning of the recovery the coefficient is large because investors are optimistic, but as the expansion proceeds the value declines as business lose this optimism; when the downturn is underway it turns large again, due to increasing pessimism. Expectational factors can be modeled by incorporating these nonlinearities explicitly.

Finally, in terms of the economic content of Kalecki's cycle theories, it must be recognized that only a small subset of economically relevant mechanisms are included in his cycle models

(see Sawyer, 1996: 94-95). In particular, there is no consideration of labor market dynamics. Nor is there any explicit consideration of financial issues (other than those captured in the principle of increasing risk) since the monetary system is passive. Non-orthodox cycle theories (which allow unemployment to exist over the cycle) have emphasized the importance of these two factors in explaining the cycle.

Goodwin's (1967) model, which assumes that the change in the real wage depends on the rate of unemployment, differs from Kalecki in that it has no room for effective demand issues due to the assumption that all saving is invested. In Goodwin's model, when unemployment is high, the real wages go down, which raises the rate of profit, which in turn boosts saving and capital accumulation. This increases the growth of output and employment, which reduces unemployment, puts an upward pressure on the real wage, thereby squeezing the rate of profit and slowing down capital accumulation. There have been attempts to incorporate such labor market dynamics into a Kaleckian model. Dutt (1992) synthesizes the approach of Kalecki and Kaldor (the latter when full capacity is reached) on the one hand and Goodwin on the other to show how economies may have persistent cycles, alternating between excess capacity and full capacity utilization, but when subjected to severe shocks, they may be destabilized and travel down a depressionary spiral. Minskyan (1982) models deal with financial and expectational factors. We have already noted that Kaleckian models have been modified to result in the possibility of such cycles.

Overall, it can be argued that Kalecki's insights into the functioning of capitalist economies were much more important than his business cycle models. Velupillai (1979: 263) writes that "Kalecki's models may have misguided generations of well-meaning economists who had neither the master's genius nor his powerful economic intuition". These considerations

appear to corroborate the previous section's unwillingness to include Kalecki's cycle theories among his central contributions. At the same time, our analysis shows that Kalecki's insights can be and have been used as bases to develop more plausible models of the business cycle.

3.8 *Growth*

As discussed earlier, Kalecki's analysis of growth is conducted by imposing the condition of steady state growth in his business cycle models. Gomulka et al (1990) argue that this procedure is fine when the growth equilibrium is stable. But when it is unstable one needs to take explicit account of the ceiling and floor growth rates determined by the supply of labor and capital and by innovation investment. In this case they take the simple arithmetic average of these two boundaries to get a value of the growth rate. Aside from the fact that this is not in accord with Kalecki's empirical assessment about the economy ever being at the ceiling, in this case the growth rate is determined entirely by extraneous elements and not by the actual dynamics of the system.

Most Kaleckian contributions on growth depart from Kalecki's cycle models and use continuous time models of steady growth. New determinants of growth have been explored using this analysis. By introducing the rate of capacity utilization into the investment function in a Kaleckian model Dutt (1984, 1990) and Rowthorn (1981) find that the equilibrium rate of growth depends on the distribution of income: a shift in income distribution towards profit recipients results in a decline in consumption demand, reduces capacity utilization and hence reduces the rates of investment and growth. This result follows from having both the rate of profit and the rate of capacity utilization in the desired investment function or from having the rate of capacity utilization alone. Bhaduri and Marglin (1990), however, show that if desired investment depends on the markup (or profit share) and the rate of capacity utilization, then a shift towards profits

may reduce or increase the growth rate of the economy, so that growth may be profit led or wage led. While these models do not incorporate lags into their investment functions, it is a simple matter to modify them by assuming that investment plans (as a ratio of capital stock) depend on these determinants, and actual investment (as a ratio of capital stock) changes over time in response to deviations from investment plans. In long-run equilibrium, of course, planned and actual investment are equalized.

On technological change, Rowthorn (1982), Dutt (1990) and Lavoie (1992) have considered technological change in Kaleckian models. These model shown that labor-saving technological change can have a variety of effects on the economy, and effects on labor markets, industrial concentration, and aggregate demand have all to be taken into account. Since technological change displaces labor, and given the growth of labor supply, can increase unemployment, it can cause profit margins can increase and possibly reduce the rate of growth. But if technological change increases investment spending as emphasized by Kalecki, it may, but need not, counter the above effects and raise the rate of growth of the economy. The models do not necessarily imply that technological change is essential for growth: strong animal spirits can do the job as well. It should also be noted that allowing technological change to play a role in such models does not imply that we are introducing an exogenous determinant of growth, since technological change can be endogenized (see Dutt, 1992b, You, 1992, Lima, 1997a) in Kaleckian models. Thus, unlike Kalecki's view, not outside force is necessary to sustain growth in the long run.

Growth patterns in models with numerous other modifications of the Kaleckian model have been examined as well, including economies in which workers own capital, in which rentiers make loans to capitalists (1992a) and in which the markup changes endogenous to reflect changes

in industrial concentration (Lima, 1997b). I now turn to three such modifications involving multisector issues, government policy, and open economy considerations.

3.9 *Multisector models*

A variety of multisector models have been developed along Kaleckian lines. As mentioned above, Kalecki himself pointed out that there were two types of sectors: those with excess capacity and cost-determined markup price, and those with supply constrained and demand-determined price. Kalecki's ideas have been formalized in models of agriculture-industry interaction, developed especially for less-developed countries. The industrial sector is modeled along Kaleckian lines and the agricultural sector is flexprice, as in Taylor (1983). The model can be used to show how increases in agricultural prices and the agriculture-industry terms of trade can choke off industrial demand if agricultural consumption is price inelastic, thereby resulting in industrial stagnation. Simulation models in which the agricultural sector produces intermediate inputs used in the industrial sector have also been developed (see Taylor, 1983, 1990).

Models with consumption and investment goods sectors have also been developed, both sectors with excess capacity and markup pricing, to analyze the sectoral allocation of non-shiftable capital. An early short-run model is developed in Harcourt (1965), and long-run issues involving capital accumulation are discussed in Dutt (1990) where it is shown that the economy converges to a balanced growth equilibrium. One issue raised in the long-run models is whether or not in Kaleckian models the rate of profit are intersectorally equalized: Dutt (1990) argues that it is possible to have Kaleckian models with markup pricing in which the rate of profit can be intersectorally equalized; more on which below. To consider one last example, the interaction between sectors which are called productive and unproductive have been analyzed using two-

sector Kaleckian models (see Dutt, 1992c). The models suggest that even the unproductive sectors may have a positive effect on growth by boosting demand.

3.10 *Government*

Laramie and Mair (1999) follow Kalecki and analyze the effects of various kinds of tax policy changes using a number of Kalecki's models, including his cycle models. Long-run issues regarding government debt are analyzed by You and Dutt (1996) who examine the distributional effects of government debt by taking into account the stimulative effects of government deficits: the analysis suggests that debt reduction does not necessarily improve distribution and growth prospects. Taylor (1991) introduces fiscal constraints on growth by requiring the economy to satisfy a public sector borrowing ratio requirement: in models such as this the economy can be constrained by a fiscal constraints in addition to a demand constraint.

3.11 *Open economy issues*

As mentioned above, Kalecki discussed the expansionary effects of an export surplus very early on. Subsequent work along Kaleckian lines has also examined the expansionary effects of improvements in income distribution due to the fact that the import propensity out of profit income is generally higher than that out of wage income (see Dutt, 1984, and Arestis and Driver, 1987). Dutt (1984) also argues that a higher degree of monopoly, which implies a higher price, may make the domestic good less competitive in foreign markets, and thereby accentuate the retarding effects of a rise in monopoly power.

In an open economy, however, it is not appropriate to assume that the markup is exogenous to foreign trade. In Blecker's (1989) model the markup is endogenous, depending both on an exogenously-given target markup and competitiveness. The more competitive the economy, the higher the markup its firms can charge. With this modification, a fall in the targeted

markup, or alternatively, a rise in the money wage may, but need not necessarily imply an increase in the economy's growth rate. Blecker discusses conditions under which each case is more likely.

Kaleckian models have also been employed to examine trade between economies. Taylor (1983) has developed a North-South model to examine the interaction between a North which is Kaleckian with markup pricing and excess capacity utilization and its rate of growth is demand determined, while the South has an exogenously-given real wage. Dutt (1990) examines the possibility of uneven development in this model due to preferences changes in favor of Northern goods and due to Northern technological change, and due to increasing monopoly power in the North.

These models, however, abstract from international capital flows, and one may ask whether in an increasingly globalized world economy with capital flows Kaleckian models with markups which are exogenous to capital flows are relevant any longer. It can be argued that the increasing importance of transnational corporations can be interpreted as reflecting increases in, or at least the maintenance of the degree of monopoly in goods markets while at the same time increasing the tendency towards the international equalization of rates of profit. The validity of this argument depends on whether multisector models along Kaleckian lines with equalized rates of profit are internally consistent; see below. A Kaleckian model with transnational corporations with markup pricing operating in the South has been developed in Dutt (1996), although without the international equalization of rates of profit, to examine the implications of increasing foreign direct investment flows from the North to the South for the global pattern of development.

3.12 Concluding remarks

This review of Kaleckian contributions confirms some of the conclusions of the previous section. Kalecki's contributions on pricing, distribution and effective demand have led to numerous

modifications which have analyzed a host of issues, many of which were not sufficiently examined by Kalecki. Not only is this true of the analysis of issues directly related to pricing, distribution and effective demand, but also in the analysis of cycles and growth, in which these contributions, rather than Kalecki's own models of cycles and growth, have had the major influence.

This review has emphasized models of growth in which the economy comes to a long-run equilibrium with steady state growth. In addition to the compatibility of the concept of equilibrium with Kalecki's work which I discussed in the previous section, this raises the question of the relationship between the short run and the long run. Kalecki argued that "the long-run trend is but a slowly changing component of a chain of short-run situations, it has no independent entity" (Kalecki, 1971: 165). Taken literally this implies that Kalecki argues against any notion of long-run equilibrium, believing in the long run only as an average of short-run situations. However, a broader interpretation is that the long-run equilibrium should not be independent of, or qualitative different from, short-run situations. Indeed, the notion of long-run equilibrium that is used in the Kaleckian models is simply an outcome of short-run situations and there are no *qualitative* differences between short- and long-run equilibria in the sense that one has unemployment and the other full employment, and one has excess capacity and the other full capacity. The long-run equilibrium is similar to the short run except that it requires that the growth rate does not change over time (and in multisector models that the sectoral composition of capital becomes constant). Thus there is no necessary contradiction between the views of Kalecki and the concept of long-run equilibrium employed in the Kaleckian models.

4. Kalecki, the Kaleckians, and their critics

It is widely recognized, even among those who are sympathetic to Kalecki's work, that there are many problems with his contributions. I have already mentioned the difficulties concerning his

treatment of pricing, especially concerning aggregation issues, and with his models of the business cycle and growth. These problems, however, have arguably not affected the relevance of Kalecki's work. This section critically examines three further recent criticisms of Kalecki and the Kaleckians from non-orthodox quarters, and explores what implicit criticisms explain the mainstream neglect of Kalecki to examine to what extent, if at all, they compromise Kalecki's relevance today.

4.1 *Multisectoral issues and intermediate goods*

Steedman (1992) has criticized Kalecki and the Kaleckians for ignoring what he considers to be two central facts about productive processes in modern industrial economies: first, that they use produced inputs and second, that they produce more than one type of output. The second fact is self evident; to establish the first he points out that about 2/3 of manufacturing gross output in the UK in 1978 is not accounted for by wages, salaries and profits, which means that they are accounted for by intermediate goods. Steedman then uses a multisector input-output system with produced means of production a la Sraffa (although without intersectorally equalized profit rates) to criticize some results and question the general applicability of Kaleckian analysis. He uses a model first with circulating capital only, in which each sector has its own markup rate which is charged over prime costs which include the cost of materials priced at the prices determined by the model. Steedman points out that the price of a good depends not only on the markup in the sector producing, but on other markups as well. Based on this analysis Steedman also questions the logic of exogenously-given wage shares (which depend on some kind of average markup), since these shares and markups depend on the markups of all the sectors. Leaving aside issues relating to long period positions (see below), Steedman argues that similar problems arise for the

cases of fixed capital. He also points out the difficulties involved in handling the case of joint products.

Eschewing a point-by-point response to the questions based on these and many other issues Steedman raises,¹³ I confine my remarks to three comments.

First, there are two separate issues that Steedman seems to conflate in his critique: one is the issue of intermediate goods and the other is the issue of many goods. The data he produces to justify his critique, cited above, relates to intermediate goods, but his criticisms really apply to the multiple goods issue, not to the issue of intermediate goods as such. If we incorporate intermediate inputs into the analysis, but continue with the assumption of one good, then the pricing equation becomes

$$P = \mu (a_0 W + a_1 P),$$

where a_0 is now the labor-output ratio and a_1 is the intermediate input-output ratio. This equation reduces to

$$P = [\mu/(1-\mu a_1)] a_0 W,$$

which reduces to the form $P = \mu' a_0 W$, with $\mu' = \mu/(1-\mu a_1)$. The 'gross' degree of monopoly depends positively on the markup rate μ and the intermediate input-output ratio. The share of labor in value added is given in this case by $(1-\mu a_1)/(1-a_1)\mu = 1/(1-a_1)\mu'$. Nothing of substance changes in Kalecki's theory of pricing and distribution or of anything else: the same factors as before affect the markup, since we have already noted above that the markup is affected by technological factors.

Second, the appropriateness of a theoretical framework depends on the purpose for which it is to be used. Sawyer (1992) correctly distinguishes between three different uses to which the Kaleckian framework of markup pricing has been put: pricing studies for particular industries; providing microeconomic foundations to pricing and production

decisions in macroeconomic models of distribution, output, cycles and growth; and the general equilibrium analysis of relative prices in a multisectoral model. Since our concern here is not with particular industries, I confine my attention to the second and third uses. As our reviews above show, most of the work done by Kalecki and the Kaleckian relates to one-sector macroeconomic models, in common with most other kinds of macroeconomic models. The reasons for using a one-sector assumption in these models are simplicity, and to avoid the contamination of theoretical results with “noise” due to non-systematic differences between sectors. If there *are* systematic differences between sectors which should be taken into account, and which are likely to have major effects on macroeconomic interactions, then a one-sector model is clearly not suitable, and two-sector models such as those discussed above or models with a continuum of sectors should be used. However, in the absence of such systematic differences, it appears worthwhile to buy the simplicity of a one-sector framework. The results obtained from a one-sector model, may not be strictly accurate or “realistic”, but will not be systematically different from those of multisector models. One may disagree with this procedure, but then one is disagreeing with the value of all one sector macroeconomic models. Many of Kalecki’s assumptions and results are strictly valid for a one-sector framework. To claim that they are not strictly valid in a multisectoral model as Steedman does is formally correct to miss the point of one-sector analysis.

Third, if one is interested in specifically analyzing the general equilibrium determination of relative prices or in examining economies for which systematic sectoral differences exist, then a one commodity is clearly inappropriate and multisectoral models of the type discussed in the previous section should be used. These models should not use the types of assumptions used for one-sector models. For instance, one should assume different markup rates for different sectors

as done, for instance, in Dutt (1990) and suggested by Steedman (1992), and not enforce some kind of exogenously-given macroeconomic markup assumption which “determines” overall income distribution. Since Kaleckian models have not been widely used to examine the determination of relative prices, Steedman’s (1992) analysis is helpful in providing a warning that constructions suitable for a one-sector framework will not be suitable in general for a multisector framework, and further and more importantly, in providing suggestions on directions to follow in developing such models.

4.2 Long period positions

A second set of criticisms of the Kaleckian framework have been made by heterodox economists especially those belonging to Sraffian or neo-Ricardian traditions, who take the position that at least in the long period, the economy must conform to what they call normal or fully-adjusted positions. They argue that since Kaleckian models do not satisfy this criteria, they are inadequate. There are two different sets of issues here, one relating to characteristics of long period positions which can be discussed in a one sector framework, and the other relating to the intersectoral equalization of rates of profit which necessarily raises questions which can be addressed in a multisector framework.

Starting with a one-good world, the major issue concerns the level of capacity utilization in the long run. Although Kalecki usually focuses short-run and on cycles where the economy is always characterized by excess capacity (unless it accidentally hits some full capacity ceiling) and not on long-run equilibrium as such, as pointed out above, he thinks of the long run as a succession of short run with no independent existence of its own. Thus we may interpret Kalecki to say that as in the short run, the level of capacity utilization is demand determined in the long run, so that the economy does not achieve a position of full-adjusted or desired capacity

utilization. For the Kaleckians who explicitly examine long-run equilibria and introduce the rate of capacity utilization in the investment function, the problem concerning the rate of capacity utilization in the long run becomes even more transparent. Some Kaleckians, starting from Steindl (1952), have written the investment function in a form in which the desired rate of investment depends on the difference between the actual rate of capacity utilization and the planned or desired rate of capacity utilization (see Amadeo, 1986, for instance). In long-run equilibrium there is nothing which ensures that the actual and desired rates of capacity utilization are equalized.

The result that the rate of capacity utilization can be different from its desired, planned or normal level, has been criticized by a number of writers (see Auerbach and Skott, 1988, Committeri, 1986). Since the onus is on the critics to point out what mechanisms exist which prevent the existence of undesired excess capacity in the long run, rather than to simply claim that such excess capacity is incompatible with long run equilibrium, two mechanisms have been highlighted in the discussion, one involving changes in the markup and the other involving changes in investment plans.

It is argued that the existence of excess capacity will induce firms to reduce their markup rates. Since this redistributes income to wages from which the propensity to spend is higher, aggregate demand increases and this increases the rate of capacity utilization, bringing it closer to desired capacity utilization. While this is logically acceptable, Kalecki and the Kaleckians would argue that it is very unlikely to be work empirically. We saw above that Kalecki did not believe that markups fell during slumps and in fact argued that the reverse is more likely. We may add that with greater excess capacity higher overhead costs can lead to high markups, and to the extent that low capacity utilization is associated with high unemployment rates, firms may be able

to obtain higher markups (and pay lower real wages) when capacity utilization is low.¹⁴ Steindl (1952) argues that in oligopolistic industries markups do not change much in response to the rate of capacity utilization.

Regarding variations in the rate of investment it is argued that if excess capacity is too high, investment will fall. The problem with this argument is that the fall in investment will reduce aggregate demand and result in greater excess capacity, implying Harrodian knife-edge instability. It can be argued, however, against the Kaleckian approach, that this instability result confirms the problematic nature of an investment function with capacity utilization as a variable in the investment function. These arguments can be countered in a number of ways. One, it can be argued that firms simply follow a rule of thumb of investing at a higher rate when capacity utilization is higher, and there is no reason why the long run outcome of a process which embodies this kind of investment behavior should result in full or normal capacity utilization. Two, firms may be content with their investment plans as long as the degree of capacity utilization that results in the long run is within a certain range which reflects the range of what firms consider to be normal. Thus the rate of capacity utilization can be considered to be endogenous within that range. Three, there is no reason for the desired degree of capacity utilization to be exogenously given. Lavoie (1995) and Dutt (1997a) show that if one introduces strategic considerations in determining desired excess capacity, the desired degree of capacity utilization will change depending on the difference between expected growth and actual growth. Assuming adaptive expectations formation about growth, the long-run equilibrium, at which actual and expected growth are equal and desired and actual capacity utilization rates are equal, and in which standard Kaleckian results - such as the positive relation between the real wage, the labor share, and growth, obtain (see Dutt, 1997a).

A related criticism, also relevant in a single-good framework, is that Kalecki has no notion of “normal” profit rates. As Nell (1989) writes, “Kalecki seldom mentions the general, or “normal”, rate of profit, nor does he every try to present a theory of what determines it”, where this rate of profit is one that “can be expected when the output of normal capacity operation is sold at normal prices, reflecting the established degree of competition”. Nell states that in contrast Kalecki devotes much attention to the realized rate of profit which “need not bear any relation to the normal rate of profit” and argued that without such a concept Kalecki’s theory is incomplete, since it cannot determine the choice of techniques or analyze effects of changes in demand. Nell is here defining a long-run equilibrium at which capacity utilization is at its normal level. We have just argued that this is not the notion of equilibrium discussed by Kalecki, and indeed, one can think of long-run equilibrium with excess capacity. The rate of profit which emerges in that equilibrium can then be used to examine issues like the choice of techniques; there is no need for other concepts of normal rate of profit.

Turning now to the issue of intersectoral profit rates, which requires that we turn to multisector models, the main question that has been raised concerns the intersectoral equalization of profit rates. The equalization of the rate of profit has been a major theme in classical political economy, and it plays a major role in neo-Ricardian economics. The basic idea is that if the rate of profit is higher in one sector compared to another, capital will move from the sector with a lower rate of profit to that with a higher rate of profit, reducing supply in the first and expanding it in the second, thereby reducing price and profit rate in the first and increasing them in the second, bringing about profit rate equalization.

Park (1995) argues that there is an internal inconsistency in Kaleckian models with several sectors, such as that of Dutt (1990), in which markup pricing holds in each sector and investment

in each of two sectors is assumed to be a function of that sector's rate of profit and capacity utilization rate. When one introduces an equation which requires profit rate equalization across sectors, the model becomes over-determined. Dutt (1997b) points out, however, that if one wants to have profit rate equalization in Kaleckian growth models, one should introduce a mechanism which enforces such equalization within the model, and not just assume the result. Dutt (1997b) suggests that the mechanism should be introduced into the investment functions of the two sectors, for instance, by assuming that the two sectors grow at a common rate apart from a term which depends on the difference between the rate of profit in the two sectors. The result is a model which converges to a long-run equilibrium with the intersectoral equalization of profit rates, balance growth, and Kaleckian results. Park (1998-99), however, points out that such demonstrations make the unrealistic and implausible assumptions that either all firms are identical or that there is in effect one investor. Whether plausible microfoundations of the multisector Kaleckian model with profit rate equalization can be worked out remains an open question.

There remains the question whether, formal demonstrations aside, Kaleckian models are actually compatible with the intersectoral equalization of profit rates. Kaleckian models with markup pricing and stable sectoral markups appear to subvert the classical mechanism by which intersectoral rate of profit equalization come about, that is through changes in prices in response to excess demand and supply. Kalecki (1942) pointed out in his response to Whitman however, that rate of profit equalization could still come about as a result of variations in the degree of capacity utilization across sectors due to capital movements, despite there being no changes in markup. Jossa (1989) argues that Kalecki's analysis with given aggregate investment is incompatible with intersectoral profit rate equalization. However, when the assumption that aggregate investment is given is dropped, this is no longer the case. Models have been developed

to show how one can allow for Kaleckian markup pricing and intersectoral profit rate differentials in the short run. But in the longer, capital flows between sectors and changes in sectoral markups can result in profit rate equalization at normal capacity in the long run (see Dumenil and Levy, 1995). However, in models of this kind in the long-run the markups are endogenous, and Kalecki's degree of monopoly has no role to play. Dutt (1990, 1995) develops a model which comes closer to Kalecki's suggestion of profit rate equalization with given markups. However, Glick and Campbell (1995) argue against such a model, pointing out that it is implausible that despite intersectoral movements in capital markups will not change in sectors. Dutt (1995), however, argues that although capital flows across sectors may have effects on sectoral markups, the effects may not be in the direction claimed by the critics, and even if there are such effects, it will not necessarily end up with full capacity utilization, as claimed by the critics.

All this is not to argue, however, that Kaleckian multisectoral models necessarily imply profit rate equalization across sectors. Monopoly power may well result in entry barriers, and the Kaleckian notion of long-run equilibrium may not be the same as the classical-Sraffian long period position.

4.3 Kalecki versus the Kaleckians

Trigg (1994) argues that Kaleckians such as Baran, Sweezy and Cowling, whose major result is that a rise in the degree of monopoly raises the share of profits in income, which reduces the rate of capacity utilization and investment, are very different from Kalecki, despite their similarities in terms of the microfoundations which incorporates markup pricing under oligopoly. Indeed, according to Trigg the Kaleckians have bastardized Kalecki's contributions. Trigg's main target is the Kaleckian assumption that capacity utilization enters as an argument in the investment

function. He argues that Kalecki did not make such an assumption, that he (Kalecki, 1954) explicitly rejected such an assumption with good reason, and that making the assumption leads Kaleckians to contradict some of the fundamental tenets of Kalecki's system.¹⁵

Trigg is quite correct to note that this is a difference between Kalecki and the Kaleckians: as noted above, Kalecki did not assume that capacity utilization is a determinant of investment while many Kaleckians do. He is also right in pointing out that Kalecki (1954) rejected the accelerator form of the investment function with output as an argument, although Kalecki's rejection was actually regarding *changes* in output, not the *level* of output or capacity utilization. Kalecki (1954, 285) writes that "[i]t is well known that large reserve capacities exists, at least throughout a considerable part of the cycle, and that output may therefore increase without an actual increase in existing capacities." Moreover, Kalecki examined actual changes in output and investment to argue that the output accelerator, given appropriate time lags, was not empirically plausible. Kalecki therefore argues that therefore it is better to introduce output considerations through its effects on profits, rather than directly.

It is another matter whether Kalecki is justified in his argument. Kalecki's empirical analysis consists only of examining time trends of two variables and appears to be output changes rather capacity utilization levels. Moreover, his argument that with excess capacity output can be increased without physical increases in capital does not rule out that for expectational reasons investment will not respond to changes in the rate of capacity utilization. As discussed earlier, following Steindl, there may be a strong case for including capacity utilization rates in the investment function to capture Kalecki's views on the importance of market considerations in affecting investment.

Trigg's main complaint is that this assumption contradicts the fundamental tenets of Kalecki's system. First, he takes to be a fundamental tenet that a change in the degree of monopoly will does not change the level of profit: the rise in the profit share is offset by a fall in aggregate output and capacity utilization. Making investment depend on capacity utilization will change this result, which implies, according to him that the assumption is unacceptable. This argument is a circular one unless it can be shown that the level of profit is truly independent of the degree of monopoly quite independently of whether capacity utilization effects investment or not. But if we allow workers to save (which Kalecki assumes away to simplify his analysis), equations (13) and (14) show that a change in the markup does change the level of profit. Second, Trigg argues out that if capacity utilization is introduced as a determinant of investment, the boom would be fueled by cumulative increases in investment and output and the economy may not even reach the turning point. One cannot, in general, expect the business cycle to operate exactly the same way if we change the determinants of investment. However, if the markup rate is assumed to be acyclical, output will be proportional to profits and there is no reason why the cycles should be qualitatively any different. Finally, Trigg argues that an important element of the Kaleckian system is that employment cannot be increased merely by manipulating effective demand and that government-induced increases in effective demand cannot maintain the rate of profit. He argues that introducing capacity utilization as a variable in the investment function implies that the profit rate will not fall in response to an increase in effective demand, negating Kalecki's ideas. In fact, whether or not capacity utilization enters the investment function, a rise in autonomous spending necessarily increases output and the rate of profit in Kalecki's model with the difference that in the case in which capacity utilization affects investment the multiplier is larger.¹⁶ This is not to say that fiscal policy will necessarily increase output and the rate of profit in capitalist economies:

it is merely that this has nothing to do with whether or not investment depends on the rate of capacity utilization.

Trigg locates the Kaleckian errors in their orthodox Marshallian price theory according to which firms set their marginal cost equal to their marginal revenue, arguing that “[t]he analytical core of the Kaleckian model can ... be extrapolated from Marshallian monopoly theory without any reference to Kalecki’s work” (Trigg, 1994: 105). However, the fact that some of Trigg’s Kaleckians (Baran and Sweezy, and more explicitly, Cowling) have explain the determination of markup in traditional neoclassical terms does not imply that the entire Kaleckian apparatus which uses markup pricing become Marshallian or neoclassical. It should be recalled, as noted previously, that Kalecki himself grappled with elasticities of demand and marginal costs in his work on the degree of monopoly. Moreover, the work of the Kaleckians cannot be captured in terms of the partial equilibrium profit maximizing diagram. As Trigg notes, the demand curve of the individual firm is determined by aggregate demand, and this level of aggregate demand is not determined in the diagram. The Kaleckians, like Kalecki, carefully examine how the output of firms is determined by market clearing in the goods market, which cannot be shown in the diagram showing the profit maximizing equilibrium of one firm. Finally, Trigg’s main criticism of the Kaleckians concerning their investment function with capacity utilization as an argument, but this has nothing to do with the so-called Marshallian features of Kaleckian theory. Trigg seems to focus on a red herring for a crime that has not been committed!

4.4 Mainstream neglect

While modern mainstream macroeconomists ignore Kalecki’s contributions - even when they sometimes invoke markup pricing - they do not provide any justification for this neglect. If one tries to find explanations however, a number of possible ones suggest themselves. One

explanation is that mainstream economists do not normally cite the work of earlier contributors, so that their treatment of Kalecki is nothing special. In support of this argument it can be mentioned that some modern macroeconomics textbooks make scant reference to even Keynes. Nevertheless, Keynesian models are a staple of most textbooks, and even schools of modern macroeconomic thought do get the name new Keynesian. Even Kaldor is being increasingly recognized as one of the forerunners of endogenous growth theory. Thus we are in need of an explanation specific to Kalecki.

Explanations may be sought in ideological factors because of Kalecki's Marxian roots, his terse and laconic style, and in his personal history, especially that in comparison to Keynes.¹⁷ However, an explanation which is more interesting because it can be examined further, is that Kalecki did not stress the microfoundations of macroeconomics in the way that satisfies the modern macroeconomist. Indeed, even Keynes has been dismissed as lacking rigorous microfoundations.

The usual meaning of microfoundations in mainstream economics is the explanation of economic behavior in terms of optimization subject to constraints. While this is not the place to discuss the merits of optimizing methodology, two issues are worth noting regarding Kalecki and this interpretation of microfoundations. One, as discussed in section 2, Kalecki regarded optimization to be unrealistic in oligopolistic situations. Two, components of Kalecki's and Kaleckian theories can be made consistent with optimizing behavior. As discussed in section 3, optimizing underpinnings of Kalecki's markup pricing have been provided by Cowling (1982) and others in terms of oligopoly theory, and further by Sen and Dutt (1995) in terms of bargaining theory. There is no reason why other aspects of Kalecki's and Kaleckian writings cannot be given such underpinnings. It can be argued, in fact, that Kalecki's work, because it is based on

imperfect competition, would be more easily microfounded in this sense than Keynes's, which is based on competitive goods markets.

A broader definition of microfoundations is one that does not insist on optimization, but gives careful consideration to the behavior of individual decision-making units in developing macroeconomic theory. Kalecki's careful analysis of the pricing behavior of firms, his ideas about the investment activities, about banks and about the behavior of unions, could serve as a fine basis for providing such microfoundations based on careful empirical work which takes into account the macroeconomic environment in which these agents operate.¹⁸

5. Conclusion

This paper has attempted to assess the relevance of Kalecki's work by examining the central features of his work, reviewing the work of those who base their work on these features, and some recent explicit and implicit criticisms of his work.

It has argued that Kalecki's central contributions lie in his theories of pricing, distribution and effective demand. Although Kalecki spent much effort in analyzing the problem of growth cycles, his own formal contributions in this area are less relevant than some of the ideas they contain. Kaleckian authors have developed his analysis of pricing, distribution and effective demand and built on them with insights from his informal writing on inflation and financial issues and from his cycle and growth models, to analyze a large range of issues covering the entire range of macroeconomics. Most of the criticisms of Kalecki and the Kaleckian are off the mark, and to the extent they are valid, can be taken to make this work even more relevant.

Beyond the relevance of the *content* of the work of Kalecki and his followers, which has been the focus of this paper, Kalecki's relevance also lies in his *method* of analysis, which combines the use of formal equations, empirical observation and political economy analysis to

develop an understanding of the functioning of capitalist economies and the global economy. Although this paper has focused on his formal contributions, it has also hopefully provided a glimpse of how Kalecki has combined this with his empirical observation of the actual operations of industrial firms and with his political economy analysis regarding the influence of class struggle on the markup and the political limits to fiscal policy.

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NOTES

¹ There is a debate about whether Kalecki's contributions actually preceded Keynes's. Patinkin (1989) argues against it, while Robinson, Feiwel (1989) and others give Kalecki priority. This controversy need not detain us; we are emphasizing the fact that Kalecki's contributions were considered to be comparable and even better than Keynes's.

² I examined the indexes of two influential graduate textbooks of macroeconomics, both sympathetic to Keynesian traditions. Blanchard and Fischer (1989) have no mention of Kalecki, and Romer (1996) mentions him in one footnote as "an early advocate of the importance of the behavior of the markup for fluctuations".

³ See also Sawyer (1982), Reynolds (1987), Arestis (1992) and Lavoie (1992) for post Keynesian treatments strongly influenced by Kalecki.

⁴ For an evaluation of the relevance of Kalecki's work which takes this approach, see Sawyer (1998).

⁵ The survey is by no means an exhaustive one. The paper concentrates on contributions which illustrate the main argument of this paper

⁶ The discussion must be very brief. For a more extended discussion see in Sawyer (1985). For an earlier account see Feiwel (1975).

⁷ Kalecki sometime defines the markup in a difference way. In our notation, his measure of the markup is given by $\mu' = (P -)/P$.

⁸ See Sawyer (1985: 29). In subsequent versions Kalecki stressed that the markup *represented* the degree of monopoly, and the controversy seems to have been resolved in Kalecki's favor.

⁹ See also Courvisanos (1996, chap. 2) and Sawyer (1996) for useful reviews.

¹⁰ Empirical support is obtained for the markup pricing approach by Cowling and Waterson (1976) and Reynolds (1984), among others. Studies incorporating Kaleckian markup pricing are too numerous to list and include both econometric studies and computable models. See, however, Coutts, Godley and Nordhaus (1978) and Taylor (1990) for a range of studies.

¹¹ A recent analysis of the investment cycle which draws heavily on Kalecki's work, by Courvisanos (1996) comes to a similar judgement. The analysis draws on the basic ideas of Kalecki, combining them with an analysis which draws on the work of Shackle and other post Keynesians, and the evolutionary school, and does not use Kalecki's specific functional forms or his mathematical framework.

¹² The theory of credit rationing which is popular in the New Keynesian approach is also related to Kalecki's ideas, although the explanations of credit rationing have more to do with adverse selection and moral hazard than uncertainty.

¹³ Steedman discusses a number of other issues, including the applicability of the vertical integrations assumption. There is no need to enter into the discussion of each of his points, some of which have been correctly answered by his respondents, especially Sawyer (1992).

¹⁴ See also Rotemberg and Saloner (1986) for a game-theoretic argument.

¹⁵ Trigg also criticizes the Kaleckian claim that a rise in the degree of monopoly *must* reduce the wage share, pointing out that for Kalecki this outcome was far from certain since countervailing tendencies could come from changes in the price of raw materials and in industrial composition. This criticism overlooks the fact that the Kaleckians make the unequivocal claim in the context of simple one sector models. I know of no Kaleckian who would argue that the countervailing tendencies are absent.

¹⁶ In Kalecki's theory of the determination of output, we have

$$Y = A / [\mu / (\mu - 1)] s,$$

and the rate of profit is given by

$$r = /K = [\mu / (\mu - 1)] Y / K = (A / K) / s,$$

where A is the autonomous component of aggregate demand. If we introduce capacity utilization as a determinant of investment (without a lag), these equations change to

$$Y = A / \{ [\mu / (\mu - 1)] s^- \},$$

and

$$r = (A / K) / \{ s^- - [(\mu - 1) / \mu] \}.$$

¹⁷ Johnson (1973) writes, "[Kalecki] lacked Keynes' personal and cultural advantages in the matter of self-advertisement and flair in presentation to the non-mathematically gifted, as well as Keynes' roots in the mainstream liberal traditions of economics. ... Given Kalecki's importance in the formative years of Keynesian theorizing, the question natural arises why his academic stock dropped so rapidly after the period of his major contributions. His disappearance from sight into the United Nations Secretariat, and then back to Poland, provides a large part of the explanation: without a professorship in a leading American or British university one is academically dead".

¹⁸ I should distance myself from the interesting but in my opinion flawed argument put forward by Kriesler (1987, 1996) and Osiatynski (1992) that Kalecki provides a better integration of microeconomics and macroeconomics than both neoclassical and the classical-Keynesian approaches. Kriesler (1996) argues that Kalecki's integration takes the form in which his theory of distribution is derived from microeconomic considerations (see equation (13) in the text which is based on micro issues concerning the degree of monopoly) and his theory of profit is derived from macroeconomic considerations (see equation (11) which is based on the macro theory of effective demand), and that his theory of income determination, which combines these two theories (as in equation (12)), therefore integrates the micro and macro sides. However, as we have seen above, this kind of strict dichotomy breaks down if one departs from Kalecki's simplest model, for instance by incorporating overhead labor, saving by workers, and the effect of capacity utilization on investment. Kriesler's defense of his explanation in terms of first approximations in an iterative process is not convincing, because in a general equilibrium system of mutual determination, there is no unique way to derive the first iteration. Moreover, it is not clear that only macroeconomic factors enter into the determination of profits (since it depends on the investment and saving propensities, and these clearly depend on the behavior of individual decision makers) and only microeconomic factors enter into the determination of distribution (since not just firm-level factors, but also the macroeconomic state of class struggle affects the markup). Finally, the search for a proper integration of microeconomic and macroeconomic phenomena ought to be found both within theories of distribution and profits.

Market Concentration and Technological Innovation in a Dynamic Model of Growth and Distribution

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Abstract: This paper develops a macromodel of growth and distribution in which endogenous technological innovation plays a pivotal role. The innovation rate is made quadratic in market concentration, to capture a plausible neo-schumpeterian non-linear influence of market structure on firms' propensity to innovate. Concentration is endogenous, though, since under neo-schumpeterian competition the relation between market structure and technical change cuts both ways. Investment will then be non-linear in concentration, and the effect of changes in concentration on capacity utilization, growth and distribution will depend on the level of concentration. Demand also plays a role, with capacity utilization and growth rising with the wage share. The stability of the system will depend on the direction and relative strength of the innovation effects with respect to the demand ones, and on the relative bargaining power of workers and capitalists.

1. Introduction

A distinctive feature of the post keynesian approach to growth and distribution following the traditions of Keynes and Kalecki is the fundamental role played by the latter in the dynamics of the former. When technological change is brought into the picture, labour-saving innovations will affect distribution by lowering unit labour costs and thus the share of labour in income. Actually, technological change which raises labour productivity exerts a quite fundamental influence on capital accumulation and growth, either directly by eventually requiring the installation of new machines or indirectly by affecting distribution. Indeed, this influence becomes even greater and more complex when technological innovation is made endogenous rather than assumed to drop as manna from heaven. When technological change has been endogeneized in the post keynesian literature, though, it is usually seen as somehow following from the accumulation of capital.

This paper contributes to the post keynesian literature by elaborating a dynamic model of growth and distribution in which endogenous technological innovation also plays a pivotal role, though through a different route. The underlying presumption is that there are increasing returns to greater cross-fertilization between the neo-schumpeterian approach to technical change and the post keynesian approach to growth and distribution, there being interesting unexploited possibilities worthy of working out. One possibility is to have technological innovation determined by market structure, and the alternative pursued here is to have it in a non-linear way, with labour-saving innovations being quadratic in market concentration. This simplified innovation function is intended to capture a plausible neo-schumpeterian non-linearity in the influence of market structure on firms' propensity to innovate: innovation is lower for both low and high levels of concentration, it being higher for intermediate ones.

Market concentration dynamics is also affected by technological change, since in a situation of neo-schumpeterian competition the relationship between them is double-sided, and the model of this paper incorporates this other dimension as well.

Given this non-linearity in the innovation function, firms' desired investment will also be non-linear in market concentration, which implies that the direction and the intensity of the effect of changes in concentration on capacity utilization, growth and distribution will depend on the prevalent concentration. However, the dynamics of these variables, including the latter one, is as well affected by demand factors in a post keynesian manner, with both capacity and growth rising with the wage share, and concentration falling with the growth rate. Hence, this paper also contributes to the neo-schumpeterian literature by incorporating effective demand and distributional elements into concentration dynamics. In the end, the stability properties of the system will depend on the direction and relative strength of the innovation effects with respect to the demand ones, and on the relative bargaining power of workers and capitalists.

This paper is organized as follows. Section 2 presents a brief conceptual interlude on the double-sided relation between market structure and technological change. Section 3 describes the building blocks of the model. Section 4 analyzes its behaviour in the short run, while Section 5 does the same for the long run. Section 6 examines one possible long-run multiple equilibria dynamics leading to the emergence of cyclical behaviour, while the last one summarizes the main conclusions derived along the way.

2. Conceptual interlude

The post keynesian approach to growth and distribution is mostly known for the models developed by N. Kaldor, J. Robinson and L. Pasinetti in the 1950s and 1960s. Here, however, we distinguish between those earlier models and the newer ones developed

independently by authors more closely associated with the Kalecki-Steindl tradition like R. Rowthorn and A. K. Dutt in the 1980s. Despite their shared non-neoclassical pedigree, there are two main differences between these approaches. First, while the older models are basically set in a keynesian competitive world, the newer ones of Kalecki-Steindl inspiration deal with an oligopolistic setting in which cost-plus prices prevail. Second, the older models implicitly assume that in the long run either full capacity is reached or capacity utilization is fixed at a given normal level, while in the newer approach capacity utilization is endogenous, not being assumed to be equal to a normal value in any run. Consequently, while in the older view there is an inverse relation between the real wage and the rates of profit and capital accumulation, such relation is usually positive in the newer one.

A presupposition underlying this paper is that there are increasing returns to greater cross-fertilization between the neo-schumpeterian approach to technical change and the newer post keynesian approach to growth and distribution. In the former, several aspects of technical change and industrial structure dynamics have been examined, such as product and process variety through innovation, imperfect competition and changes in market structure via creative destruction, increasing returns and cyclical growth (Lima, 1996). In the latter, formal models do not rely upon the tools of market clearing at full utilization of capital and labour via competitive prices and intertemporal optimization under unbounded rationality, with effective demand playing a central role instead. However, several possibilities which are opened up by a greater cross-fertilization between these approaches have not been subject to elaboration in both sides of the fence.

For instance, the newer post keynesian approach can benefit from several elements of the neo-schumpeterian literature on the links between market structure and technical change.

As Stoneman (1991) cogently puts it, technical change will usually generate imperfectly competitive market structures and the incentives for innovation largely rely upon imperfect market structures, so that models incorporating technical change should be oligopolistic in nature; and this is the case in post keynesian models. Cross-fertilization is a two-way avenue, though, meaning that the micro-oriented neo-schumpeterian approach to technological change and industrial dynamics will benefit from the incorporation of some elements of the macro-oriented post keynesian approach to growth and distribution, especially distributional and effective demand ones under endogenous capacity utilization.

When technological change has been treated as an endogenous phenomenon in the post keynesian literature, be it the older or the newer one, it is usually linked to accumulation of capital using either Kaldor's technical progress function (e.g. Kaldor, 1957, 1961, 1966) or Arrow's (1962) learning-by-doing function (e.g. Rowthorn, 1981; Dutt, 1990, 1994; Taylor, 1991; You, 1994A, 1994B; Watanabe, 1997).¹ In the neo-schumpeterian view, though, technological competition through innovation is seen to be more important than price competition, for it is the most decisive weapon for firms seeking to gain and/or maintain lasting competitive advantages. Although it is not denied that technological change is somehow endogenous to the process of capital accumulation and to the labour market dynamics, it is claimed that changes in market structure are a major force shaping the rate and the direction of technological change.

Besides, this relationship is a two-way one: market structure affects and is affected by technological change (Nelson and Winter, 1982). Admittedly, there is a multitude of factors involved in this two-way relationship, and to mention just a few of them: degree of interfirm competition and propensity to innovate; effect of the degree of diffusion of new technological

knowledge on the urge to invest in R&D; innovative competition over products and methods of production; and influence of the threat of new competitors on the propensity to innovate. Regarding the connection running from market structure to innovation, though, it seems natural to work out the growth and distributional implications of a Schumpeter-based hypothesis that a more concentrated market may eventually be conducive to higher innovation rates. A natural question to address regards to what extent -- and under what conditions -- this innovation effect may eventually reverse the positive relation between growth and distribution obtained in the newer post keynesian models developed by Rowthorn (1981) and Dutt (1984, 1987).²

In Schumpeter's discussion of the effects of market power on technical innovation, there are two distinct themes. First, there is the view most clearly presented in Schumpeter (1912) that recognizes that firms require the expectation of some transient market power to have the incentive to invest in R&D. Indeed, it is a relatively uncontroversial claim that the innovator must see some means (patent, barriers to entry, etc) for actually realizing extraordinary profits from her investment in the innovation. Second, and more controversially, there is the view most clearly argued in Schumpeter (1942) that the possession of ex-ante market power also favored innovation. One reason is that an oligopolistic structure makes rival behaviour more stable and predictable, thereby reducing the uncertainty associated with excessive rivalry that tends to undermine the incentive to innovate. Another reason is that with imperfect capital markets the profits derived from the possession of ex-ante market power provides firms with more internal financial resources to invest in innovative activities. In fact, this second reason is related to the first one: owing to the presence of moral hazard associated with developing a new process whose feasibility is uncertain, the innovating firm must bear a

substantial share of the development costs (Kamien and Schwartz, 1982).

Third, Schumpeter appeared to argue that ex-ante market power would tend to confer ex-post market power, in that a successful innovation will grant at least some temporary market power. The underlying presumption seems to be that innovation is both a means for realizing monopoly profits and a method of maintaining them afterwards. Since monopoly profits can only be realized through innovation if imitation by rivals can be limited or prevented altogether, the power to exclude rivals is the key to the achievement and retention of them.³

The other side of the picture is that weak competition may reduce the spur to innovation, in that the firm already in possession of monopoly power feels less threatened by rivals and therefore less compelled to innovate; absent either opportunities to increase market share significantly or a threat of being driven out of business as a laggard, the incentives and pressures to search for innovations are dulled. For instance, a firm with monopoly power is in an advantageous position to be a 'fast second' in the development of an innovation. Because of its resources and established reputation and channels of distribution, a firm with monopoly power can afford to wait until someone else innovates and imitate it quickly if it appears to be successful. Besides, in a firm realizing extraordinary profits managerial whim may decide whether resources are devoted to keeping technological leadership or to other forms of managerial consumption.

Turning to the empirical literature, one will find few conclusive evidence on the relationship between market structure and technological innovation. Empirical studies indicate that even if some generalizations can be made, they have to be interpreted with utmost care. The reason is that these results are strongly dependent on specifics of the empirical study like the type of industry or sector, time period, kind of innovation and, most importantly, local

features such as technological opportunities and appropriability conditions.⁴ All in all, empirical studies tend to boil down to general statements such as that there is a market structure intermediate between monopoly and fierce competition which is actually most conducive to innovation. Thus, it seems conceptually reasonable and empirically plausible to specify an innovation function stating that the rate of innovation is lower for both low and high levels of concentration, it being higher for intermediate ones. It is this specification that will be used in the following sections to formalize this side of the double-sided relationship between market structure and innovation (cf. eq. (4) below).

On the other hand, those who claim that a concentrated market is more conducive to innovation should be ready to admit that the reverse pattern could also be true: a firm that innovates successfully may grow and capture a larger share of the market, thus causing concentration to rise. In turn, an innovation which is relatively easy to imitate may well result in many new firms and the emergence of a more competitive industry, even though the number of firms may decline as the market becomes saturated. Therefore, the inherent formal difficulties associated with an adequate modeling of the non-linear causation running from market structure to technological innovation are compounded by the empirical evidence showing that market structure cannot be taken as an independent variable; the incessant process of creative destruction, by means of changing the relative balance between firms, engenders the endogeneity of market concentration (Dosi, Malerba and Orsenigo, 1994).

Technological change affects market structure in two primary ways. First, through influencing the optimal scale of production in an industry. In case the minimum efficient plant size increases (decreases) as a result of technological change, then there will be a tendency for the industry to become more (less) concentrated. In many industries, the volume required for a

firm to use all the specialized resources and promote continuous substitution in production methods means that only a few firms can exist. Second, through the erection of barriers to entry: the first firm to introduce a successful innovation may gain a significant advantage over its rivals, an advantage that may derive, for instance, from the realization of extraordinary profits that are available for additional R&D expenditures and the development of an expertise that cannot be easily duplicated.

Indeed, these two channels are related, in that some of these barriers to entry have to do with the large capital expenditures required to build plants. Entry in small scale would presumably be unsuccessful, the reason being that small firms are usually less efficient than large ones in concentrated industries. Besides, scale and efficiency in production may become more important as technologies matures, so that the opportunities for small firms become fewer. Now, barriers to entry are the less formidable, the higher the growth rate. A higher growth rate, for instance, facilitates new entry by reducing the share of market needed to attain the most efficient scale of production. Further, barriers to entry appear less formidable with faster growth because new entrants are encouraged to enter industries through the attraction of higher profits.

For Kalecki (1940-41), one of the most important effects of technical change is that it increases the degree of oligopoly because it promotes market concentration, and support for the proposition that a rapid rate of innovation leads to concentration can be found in the stochastic models of firm growth used in the simulation models of Nelson and Winter (1982). However, arguments have also been made that a rapid rate of innovation does not necessarily imply a more concentrated market structure. Mansfield (1983), for instance, argues that the presence of long-lived capital and costly adjustment by firms and consumers implies, at least in

the short run, that innovation can make a market either more or less concentrated. Blair (1972) reviewed the impact of technical change upon economies of scale and concluded that from the late eighteenth century through the first third of the twentieth century technical change increased concentration, as advances in steam power, materials and methods of fabrication and transportation permitted and encouraged scale expansion. Since then, though, newer technologies tended to have the opposite effect, reducing plant size and capital requirements for optimal efficiency. While Mansfield (1984) presents mixed empirical evidence on the Blair hypothesis, Geroski (1994) provides evidence showing that the major innovations introduced in a wide range of industries in the UK during the 1970s actually lowered levels of concentration. In the model that follows, the rate of change in concentration is made to depend negatively on the innovation rate (cf. eq. (23) below).

Besides, market structure also influences diffusion patterns, meaning that the speed with which transient quasi-rents are eroded away by potential imitators is itself affected by the level of concentration. Even though there is no consensus around a general model of diffusion, most studies agree that the rate of diffusion is positively related to the cost advantage of the innovation. In turn, the recent survey of empirical works on diffusion by Karshenas and Stoneman (1995) reports that most of the empirical studies on inter-firm diffusion has found a positive relation between firm size and speed of adoption in relation to a wide range of technologies in different industries. Even though the evidence on the influence of market structure is more ambiguous, this survey shows that there is evidence of a positive relationship between growth and diffusion -- a finding which corroborates a point made by Steindl in the introduction to the 1976 reprint of his Maturity and Stagnation, where it is argued that the diffusion of consumer and investment goods depends on income and its rate of growth.

Relatedly, a conclusion derived in Silverberg, Dosi and Orsenigo (1988) is that diffusion is the faster, the higher the prospects for learning in a broad sense, with the latter being the higher, the higher the growth rate. Besides, Lissoni and Metcalfe (1994) reviews empirical evidence showing that the adoption profitability is a chief determinant of the speed of diffusion, with diffusion being more rapid when a broadly defined rate of return from adopting it is greater. Since in the model of this paper the rates of profit and growth move in the same direction, it is plausible to assume that the higher the growth rate, the faster the rate of diffusion and the shorter the transient extraordinary profits generated by an innovation. Hence, the specification that will be used in what follows makes the rate of change in concentration to depend negatively on the growth rate (cf. eq. (23) below).

A final methodological word. As seen in this brief discussion of some conceptual issues related to the connection between market structure and technological change, the causal links and feedback effects at play are quite numerous and complex. The modeling challenge is thus to devise a simple formal framework that allows the sorting out of some plausible and relevant mechanisms and the working out of some of their implications. Besides, this formal framework should be as transparent as possible so that the results of the model can be satisfactorily interpreted and eventually reconsidered in a more inclusive setup. It was this presumption that guided the specification of the model to be described and analyzed in the following sections.

3. The structure of the model

We model an economy which is closed and has no government. A single good which can be used for investment and consumption is produced. Two factors of production, capital and labour, are combined via a fixed-coefficient technology

$$X = \min [Ku_k, L/a] \quad (1)$$

where X is the output, K is the capital stock, L is the employment, u_k is the technologically-full capacity utilization, and a is the labour-output ratio. Production is carried out by oligopolistic firms, and prices are given at a point in time, having resulted from previous dynamics. Firms will produce according to demand, it is being assumed that demand is not enough for them to produce at full capacity at the ongoing price.⁵ Employment is determined by production

$$L = aX \quad (2)$$

Firms' investment plans can be described by a desired investment function like

$$g^d = \alpha_0 + \alpha_1 u + \alpha_2 r + \alpha_3 h \quad (3)$$

where α_i are positive parameters of the desired investment function, g^d , expressed as a ratio of the capital stock, $u = X/K$ is the actual capacity utilization, r is the profit rate, and h is the rate of labour-saving technological innovation. Since we assumed that capacity output is proportional to the capital stock, we can identify capacity utilization with the output-capital ratio. We follow Rowthorn (1981) and Dutt (1984; 1987), who in turn follow Steindl (1952), in assuming that investment depends positively on capacity utilization due to accelerator-type effects. Like Rowthorn and Dutt, who follow Kalecki (1971) and Robinson (1956; 1962), we make investment to depend on the profit rate. The rationale is that the current profit rate is an index of expected future earnings, on the one hand, and it provides internal funding for accumulation plans and make it easier to raise external finance, on the other hand. Desired investment is also made to depend positively on the innovation rate, the latter leading to more investment, at any given capacity utilization and profit rate, than would otherwise be the case

(Rowthorn, 1981). While Dutt (1994) invokes Kalecki's (1971) idea that the higher the rate of technological change, the more desirable is to install new machines, there are other plausible reasons. One of them is the Marxian claim that cost-reducing technological change places continuous pressures on any individual firm to invest. It is also consistent with Schumpeter's (1912; 1942) view that the process of innovation itself opens up new investment opportunities for firms, and with the neo-schumpeterian (e.g. Nelson and Winter, 1982; Winter, 1984) notion that investment is influenced by the dynamics of technical change.

At a point in time, the technological parameters u_k and a are given, having resulted from previous technological and accumulation dynamics. Over time, labour-augmenting, Harrod-neutral technological change taking place results in the labour-output ratio falling at rate h . The fixed-coefficient technology assumed here is amply supported by a reputable literature. As eminent contributors to the economics of technical change have documented -- from David (1975) and Rosenberg (1976) to Nelson and Winter (1982) and Dosi (1984) -- technological change has strong cumulative effects -- 'learning' in its various forms. Hence, technological change is typically characterized by 'localized' shifts in some production function, to use David's (1975) term, or by progress along particular 'natural trajectories', to use Nelson and Winter's (1982) concept. This implies that a more rigid, if not (at least in the short run) fixed set of production coefficients will prevail.⁶

The rate of technological innovation is determined non-linearly in a way given by

$$h = \rho c - \phi c^2 \quad (4)$$

where c is an index of market concentration, $0 \leq c \leq 1$, and ρ and ϕ are positive parameters.

We assume that $\rho = \phi$, to ensure that this concave-down parabola has two real roots,

$h(0) = h(1) = 0$. Hence, h is positive throughout its (economically) relevant domain. The level of c which will yield the highest rate of innovation is given by $c^* = \rho / 2\phi$, meaning that higher concentration will speed up (slow down) the rate of innovation for levels of c to the left (right) of c^* . This simplified innovation function is intended to capture the Schumpeter-based non-linearity in the influence of concentration on firms' innovative propensity discussed in the preceding section.⁷

The economy is populated by two classes, capitalists and workers. Following the tradition of Marx, Kalecki (1971), Kaldor (1956), Robinson (1956, 1962), and Pasinetti (1962), we assume that they have a different saving behaviour. Workers supply labour and earn only wage income, which is all spent in consumption. Capitalists receive profit income, which is the entire surplus income over wages, and save all of it, so that $s = 1$. The division of income is given by

$$X = (W/P)L + rK \quad (5)$$

where W is the money wage, P is the price level, and r is the profit rate, which is the flow of money profits divided by the value of capital stock at output price. From (2) and (5), the labour share is given by

$$\sigma = Va \quad (6)$$

where $V = (W/P)$ stands for the real wage. The profit rate can then be expressed as

$$r = (1 - \sigma)u = \pi u \quad (7)$$

where $\pi = (1 - \sigma)$ is the profit share. The price level is given at a point in time, rising over time whenever firms' desired markup exceeds the actual markup. Formally,

$$\hat{P} = \tau[\sigma - \sigma_f] \quad (8)$$

where \hat{P} is the rate of change in price, $(dP / dt)(1 / P)$, and $0 < \tau \leq 1$ is the speed of adjustment. Inflation is determined within a framework of conflicting claims, it resulting whenever the claims of workers and capitalists exceed the available income. The markup over prime costs, à la Kalecki (1971), is given by

$$P = (1 + z)Wa \quad (9)$$

where z is the markup. Given labour productivity, $(1 / a)$, the markup is inversely related to the wage share, and the gap between the desired and the actual markup can be measured by the gap between the actual and the desired wage share by firms. Desired markup depends on the state of the goods market: higher capacity utilization, which reflects more buoyant demand conditions, will lead firms to desire a higher markup. Besides, it is only natural that in a model in the Kalecki-Steindl tradition a greater concentration leads firms to desire a higher markup,

$$\sigma_f = \varphi - \theta u - \eta c \quad (10)$$

where φ and θ are positive parameters.⁸ The money wage is given at a point in time, its rate of change being in line with the gap between workers' desired share, σ_w , and the actual one:

$$\hat{W} = \mu[\sigma_w - \sigma] \quad (11)$$

where \hat{W} is the rate of change in money wage, $(dW / dt)(1 / W)$, and $0 < \mu \leq 1$ is the speed of adjustment. Workers' desired share is assumed to depend on their bargaining power, which is the higher, the tighter the labour market. The degree of tightness of the labour market is measured by the rate of change in employment. Formally,

$$\sigma_w = \chi + \lambda \hat{L} \quad (12)$$

χ and λ are positive parameters and \hat{L} is the rate of change in employment given by

$$\hat{L} = \hat{X} - h \quad (13)$$

where \hat{X} is the rate of change in output.⁹ Given the demand-driven nature of the model, the equality between investment and saving will be generated by changes in capacity utilization. Assuming that capital does not depreciate, g , the growth rate of capital stock, which is the growth rate for this one-good economy, is given by

$$g = sr \quad (14)$$

4. The behaviour of the model in the short run

The short run is defined as a time span in which the capital stock, the labour-output ratio, the price level, the money wage, and concentration can be taken as given. Excess capacity prevails and firms will produce according to demand, thus realizing their investment plans. This implies that capacity utilization will adjust to remove any excess demand or supply, so that in short-run equilibrium, $g = g^d$. Using (3), (4), (7) and (14), we can solve for the short-run equilibrium value of u , given c , σ and the other parameters of the model,

$$u^* = \frac{\alpha_0 + \alpha_3(\rho c - \phi c^2)}{[(s - \alpha_2)(1 - \sigma) - \alpha_1]} \quad (15)$$

Meaningful values for the wage and profit shares are required, and a positive profit share is automatically ensured by $z > 0$. A positive wage share is ensured by $z < +\infty$, which we assume. As regards short-run stability, we employ a keynesian short-run adjustment mechanism stating that output will change in proportion to the excess demand in the goods market. Hence, u^* will be stable provided the denominator of (15) is positive, which is ensured by the standard condition for macro stability that aggregate saving is more responsive than investment to changes in output (capacity utilization), which we assume to be satisfied. Since h is positive

within its relevant domain, this will also ensure a positive value for the numerator of u^* and thus for u^* itself. As for the impact of changes in the wage share on capacity utilization, we have

$$u_{\sigma}^* = \frac{(s - \alpha_2)u^*}{[(s - \alpha_2)(1 - \sigma) - \alpha_1]} \quad (16)$$

a subscript denoting the variable with respect to which the differentiation is being taken, a notation followed throughout. Hence, u_{σ}^* is positive and wage-led capacity utilization obtains. Like in the models by Rowthorn (1981) and Dutt (1984, 1987), an increase in the wage share - by redistributing income from capitalists who do save to workers who do not -- raises consumption demand, increases investment spending through the capacity utilization effect on investment and hence raises the level of activity. Another issue regards the impact of changes in concentration on capacity utilization. The innovation effect embodied in the investment function implies that given u and r , higher concentration will raise (lower) the innovation rate and thereby investment for concentration levels below (above) $c^* = \rho / 2\phi$. We assume that changes in concentration will not lead to immediate changes in the markup, implying that distribution is insensitive to changes in concentration in the more immediate short run. As detailed in the next section, over time distribution is crucially affected by changes in concentration, though. Formally,

$$u_c^* = \frac{\alpha_3(\rho - 2\phi c)}{[(s - \alpha_2)(1 - \sigma) - \alpha_1]} \quad (17)$$

Hence, a rise in concentration will raise (lower) capacity utilization in the short run for levels of concentration below (above) $c^* = \rho / 2\phi$. Given our assumptions that workers do not save and

capitalists save a fraction s of their income, the rates of profit and growth move in the same direction. Substituting (15) into (7) and then the resulting profit rate into (14),

$$g^* = \frac{s(1-\sigma)[\alpha_0 + \alpha_3(\rho c - \phi c^2)]}{[(s - \alpha_2)(1 - \sigma) - \alpha_1]} \quad (18)$$

Having seen that a rise in the wage share raises capacity utilization, it is natural to check if the same positive relation prevails between distribution and growth. Using (7) and (14),

$$g_\sigma^* = sr_\sigma^* = s[u_\sigma^*(1 - \sigma) - u^*] \quad (19)$$

Whether a wage-led growth will obtain depends on whether $u_\sigma^*(1 - \sigma) > u^*$, which upon substitution from (15) and (16) can be simplified to $\alpha_1 > 0$, so that a higher wage share will actually raise the rates of profit and growth. As regards the impact of higher concentration on the rates of profit and growth, the non-linear nature of the innovation function implies that both the direction and intensity of that impact depends on concentration. Using (18), the impact of changes in concentration on the growth rate in the short run can be formally expressed as

$$g_c^* = \frac{s\alpha_3(1-\sigma)(\rho - 2\phi c)}{[(s - \alpha_2)(1 - \sigma) - \alpha_1]} \quad (20)$$

A rise in concentration will thus raise (lower) the growth rate in the short run for levels of concentration below (above) $c^* = \rho / 2\phi$.

The relevant subset of the c -domain can thus be divided into two regions. In the first, comprised by low and intermediate-low concentration levels ($c < c^*$), innovation, capacity utilization and growth are positively related to concentration, and we refer to it as LMC region. In the second, comprised by intermediate-high and high levels of concentration ($c > c^*$), innovation, capacity utilization and growth are negatively related to concentration,

and we refer to it as HMC region. In turn, capacity utilization and growth rise with the wage share throughout.

5. The behaviour of the model in the long run

In the long run we assume that the short-run equilibrium values of the variables are always attained, the economy moving over time due to changes in the capital stock, the labour-output ratio, the price level, the money wage, and the concentration level. We follow the behaviour of the system via the dynamics of the short-run state variables σ and c . Given (6), and using an overhat to denote a time-rate of change, the state transition function for the wage share is given by

$$\hat{\sigma} = \hat{W} - \hat{P} + \hat{a} \quad (21)$$

or, upon substitution,

$$\hat{\sigma} = \mu[\chi + \lambda(g - \rho c + \phi c^2) - \sigma] - \tau(\sigma - \varphi + \theta u + \eta c) - (\rho c - \phi c^2) \quad (22)$$

where u and g are given by (15) and (18), respectively. As seen in Section 2, it is plausible to assume that changes in concentration are negatively related to the rates of growth and innovation. Formally,

$$\hat{c} = \beta - \gamma h - \psi g \quad (23)$$

where β , γ and ψ are positive parameters. Upon substitution, we obtain

$$\hat{c} = \beta - \gamma(\rho c - \phi c^2) - \psi g \quad (24)$$

where g is given by (18). Eqs. (22) and (24), after using (15) and (18), constitute an autonomous two-dimensional non-linear system of differential equations in which the rates of change of σ and c depend on the levels of σ and c , and on parameters of the system. The matrix M of partial derivatives for this dynamic system is

$$M_{11} = \partial \hat{\sigma} / \partial \sigma = \mu(\lambda g_{\sigma}^* - 1) - \tau(1 + \theta u_{\sigma}^*) \quad (25)$$

$$M_{12} = \partial \hat{\sigma} / \partial c = \mu \lambda [g_c^* - (\rho - 2\phi c)] - \tau(\theta u_c^* + \eta) - (\rho - 2\phi c) \quad (26)$$

$$M_{21} = \partial \hat{c} / \partial \sigma = -\psi g_{\sigma}^* < 0 \quad (27)$$

$$M_{22} = \partial \hat{c} / \partial c = -\gamma(\rho - 2\phi c) - \psi g_c^* \quad (28)$$

Only one of these partial derivatives can be unambiguously signed. Eq. (27) shows that an increase in the wage share, by raising the growth rate, will lower the rate of change in concentration. Eq. (25) shows that the impact of a change in the wage share on its own rate of change operates through changes on capacity utilization and growth. A higher wage share, by raising capacity utilization, will raise the markup desired by firms and put a downward pressure on the rate of change in the wage share by raising the rate of change in prices. However, a higher wage share will also raise the growth rate and, by raising the rate of change in employment, will raise the rate of change in nominal wages. Eq. (26) shows that the impact of a change in concentration on the rate of change in distribution operates through several channels. First, it will affect the rate of change in employment by changing the rates of growth and innovation, which will affect the rate of change in nominal wages. Second, a change in concentration, in its own and by changing capacity utilization, will affect firms' desired markup and thereby the rate of change in prices. Third, a change in concentration, by changing the innovation rate, will have an effect of its own on the rate of change in the wage share. Finally, eq. (28) shows that a change in concentration will affect its own rate of change by changing the rates of growth and innovation.

We now have all the elements for a qualitative phase-diagrammatic analysis of the (local) stability properties of this dynamic system. The way we proceed is by analyzing the

stability of an equilibrium located in each one of the two regions into which we divided the relevant subset of the c -domain.

5.1 LMC region ($c < c^*$)

The rates of innovation, capacity utilization and growth are positively related to concentration. A rise in concentration will put a double downward pressure on its own rate of change, through itself and by raising the growth rate, which makes for an unambiguously negative sign for M_{22} . The sign of M_{12} is more likely to be negative. A rise in concentration will put a strong downward pressure on the rate of change of the wage share by raising capacity utilization and the rate of innovation. Higher capacity utilization will raise the rate of change in prices by raising firms' desired markup even more -- recall that a rise in concentration will have a direct positive impact on the latter. A higher innovation rate, in turn, will lower the rate of change in the wage share directly and will put a downward pressure on the rate of change in nominal wages. This latter effect works through a downward pressure on the rate of change in labour employment leading to a weakening of workers' relative bargaining power. However, higher concentration, by raising the growth rate, will put an upward pressure on the rate of change in employment, and in case this positive effect is strong enough to more than compensate for the negative ones, M_{12} will be positive.

The sign of M_{11} depends on the relative bargaining power of capitalists and workers. Since (19) shows that $u_{\sigma}^* > g_{\sigma}^*$, it may take a strong relative bargaining power by workers to ensure a positive sign for this partial derivative. For instance, a rise in the wage share, leading to a rise in capacity utilization and growth, will only lead to a rise in its own rate of change in case the ensuing rise in workers' desired wage share is strong enough to cause a rise in the rate

of change in nominal wages which is greater than the rise in the rate of change in prices caused by the concomitant rise in firms' desired markup.

Hence, there seems to be an affinity between the signs of M_{11} and M_{12} , in that even though different signs for them cannot be ruled out, they sharing the same one seems more likely. In case M_{11} and M_{12} are negative, $Tr(M)$ is negative. However, the sign of $Det(M)$ can be negative or positive, meaning that an equilibrium solution of this type will be saddle-point unstable or stable, respectively. In case M_{11} and M_{12} are positive, the situation becomes even more ambiguous, since the sign of both $Det(M)$ and $Tr(M)$ are ambiguous. A necessary condition for stability is $Tr(M) < 0$, which requires that the extent to which the workers' desired wage share effect dominates in M_{11} is smaller than (the absolute value of) M_{22} . Although it is more likely that M_{11} and M_{12} have the same sign, they having opposite ones cannot be ruled out. In case workers' desired wage share effect is strong enough to make for a positive M_{11} , but not strong enough to make for a positive M_{12} , the equilibrium solution will be saddle-point unstable. Finally, in case workers' desired wage share effect is strong enough to make for a positive M_{12} , but not strong enough to make for a positive M_{11} , equilibrium will be stable.

5.2 HMC region ($c > c^*$)

The rates of innovation, capacity utilization and growth are negatively related to concentration. A rise in concentration will thus put a double upward pressure on its own rate of change, through itself and by lowering the growth rate, making for a positive sign for M_{22} . The sign of M_{12} is ambiguous. A rise in concentration will exert an upward pressure on the rate of change of the wage share by lowering capacity utilization and the rate of innovation.

Lower capacity utilization will put a downward pressure on the rate of change in prices by lowering firms' desired markup, whereas a lower innovation will raise the rate of change in the wage share directly and will put an upward pressure on the rate of change in nominal wages. This latter effect works through an upward pressure on the rate of change in employment leading to a strengthening of workers' relative bargaining power. However, higher concentration, by lowering the rate of growth of the economy, will put a downward pressure on the rate of change in employment, and in case this effect is strong enough to more than offset the latter one, the resulting effect on the rate of change in nominal wages will be negative. Besides, higher concentration will put a direct upward pressure on the rate of change in prices by raising firms' desired markup, and in case the combination of these two latter effects is strong enough, M_{12} will become negative.

As in the LMC region, the sign of M_{11} depends on the relative bargaining power of capitalists and workers, and since (19) shows that $u_{\sigma}^* > g_{\sigma}^*$, it may take a strong relative bargaining power on the part of workers to ensure a positive sign for this partial derivative. In case $M_{11} < 0$ and $M_{12} > 0$, the stability properties of an equilibrium solution of this type will be ambiguous, since both $Det(M)$ and $Tr(M)$ do not have definite signs. A necessary condition for stability is that $Tr(M) < 0$, which requires that the extent to which the price change effect dominates the nominal wage change effect in M_{11} is higher than the extent to which a change in concentration provokes a change in the same direction in its own rate of change.

As for the pair given by $M_{11} > 0$ and $M_{12} < 0$, $Det(M)$ will be likewise ambiguous. The sign of $Tr(M)$ will be positive, though, which rules out the possibility of a stable equilibrium. While a negative sign for $Det(M)$ will make for a saddle-point unstable

equilibrium solution, a positive one will make for an unstable one. In case workers' bargaining power is strong enough to make for a positive sign for M_{11} , and M_{12} is also negative, this will make for an unstable solution. Finally, in case workers' bargaining power is not strong enough to make for a positive sign for M_{11} , and M_{12} is also negative, the equilibrium solution will be saddle-point unstable.¹⁰

6. Multiple equilibria analysis

The Schumpeter-based non-linear innovation function makes for the possibility of multiple equilibria within the relevant subset of the $(\sigma - c)$ -space. Given that innovation, capacity utilization and growth are all quadratic in concentration, the equations describing the corresponding isoclines will as well be quadratic in concentration. Whether any of these isoclines, or both, will be a concave up or concave down parabola depends on the actual constellation of parameters. Admittedly, the latter may be such that no equilibrium will obtain in the relevant subset of the $(\sigma - c)$ -space. In any case, we proceed by developing a phase-diagrammatic analysis of the dynamics of a parametric configuration leading to the emergence of multiple equilibria, with one equilibrium obtaining in each one of the regions discussed above.

One possible configuration contains a saddle-point unstable solution in the LMC region and a solution in the HMC region which can be either stable or unstable. Let us hypothesize that the parameters are such that the following obtains. First, a negative sign for M_{11} along the c -domain, meaning that the price change effect dominates the nominal wage change one. Second, a negative sign for M_{12} in the LMC region, meaning that workers' bargaining power is not strong enough. Third, a positive sign for M_{12} in the HMC region. Finally, eq. (28)

shows the sign of M_{21} will be unambiguously negative (positive) in the LMC (HMC) region.

This configuration is pictured in Fig. 1.

[Figure 1 about here]

There is a subset of the phase plane which the economy will never leave in the event it is in it. We refer to this subset as zone of stability and to its complement as zone of instability. Starting from a point in the lower part of the LMC region and to the right of the upward separatrix through E_1 , this zone of stability can be found by tracing back the path of the economy which leads into the upper part of the separatrix all the way through the LMC and HMC regions and then (eventually) back to the LMC region.

Once inside the zone of stability, the economy will move cyclically. Suppose we begin a trajectory at point A. The direction of motion of the system indicates that it must flow rightward up until the lower part of the $\hat{\sigma} = 0$ isocline is reached, after which the system will flow rightward down. It will enter the HMC region -- through, say, point B -- and then keep the same direction of motion until the $\hat{\sigma} = 0$ isocline is reached once again, after which it will start flowing rightward up. Once the $\hat{c} = 0$ isocline is reached, the direction of motion shows that the system will flow leftward up until the upper part of the $\hat{\sigma} = 0$ isocline is reached, after which it will then flow leftward down.

After a while, the system will re-enter the LMC region -- through, say, point C -- and will keep flowing leftward down until it reaches the $\hat{c} = 0$ isocline once again. It will then start flowing rightward down in its way to reach back the HMC region -- through, say, point D -- at which another cyclical motion will begin. In case this inner part of the trajectory started at point A does not re-enter the LMC region once more, the system will remain in the HMC

region thereafter. In case E_2 is stable, there is a neighborhood of it within which all the possible trajectories of the system will tend to it, which means that the hypothetical trajectory started at point A will eventually converge to E_2 .

In the event E_2 is unstable -- the case shown in Fig. 1 -- there is a neighborhood of it, F, within which all trajectories of the system will move away from E_2 . Since the system will end up reaching that neighborhood along the hypothesized trajectory initiated at point A, it will not reach E_2 . Indeed, there may eventually be a closed, bounded area encircling the neighborhood F and from which no trajectory will exit. Since this area would contain no equilibrium points, the Poincaré-Bendixson theorem would ensure that it must contain at least one stable limit cycle (Arrowsmith and Place, 1992). Whether or not some limit cycle will emerge, the system will move cyclically within the zone of stability, showing its propensity to experience endogenous, self-sustaining fluctuations in concentration and wage share, with innovation, capacity utilization and growth fluctuating as well.

Indeed, a similar zone of stability in a two-equilibria situation is also obtained in Dutt (1992, 1994), from which this paper has drawn a lot of inspiration. Dutt (1992), however, does not incorporate technological change, and relies on full capacity being reached for multiple equilibria -- one below and other at full capacity -- to obtain within the relevant domain of a (real wage-capital to labour ratio)-space. As it turns out, Dutt's (1992) system experiences self-sustaining fluctuations within a zone of stability encompassing levels of real wage at which the economy is operating both at and below full capacity.

Dutt (1994), in turn, does incorporate (exogenous and endogenous) technological change, but again relies on full capacity being reached for multiple equilibria -- one below and

other at full capacity -- to obtain within the relevant domain of a (wage share-capital stock to effective labour supply ratio)-space. As it turns out, Dutt's (1994) system experiences self-sustaining fluctuations within a zone of stability encompassing levels of wage share at which the economy is operating both at and below full capacity. Finally, technological change is endogeneized in Dutt (1994) by being made to depend linearly on the accumulation rate, whereas here it is endogeneized by being made to depend non-linearly on market concentration.¹¹

7. Reprise

This paper contributes to the post keynesian literature by elaborating a model of growth and distribution in which a neo-schumpeterian endogenous technological change plays a central role. The innovation rate is determined by market structure in a non-linear way, with the rate of labour productivity growth being quadratic in market concentration. This specification is intended to capture a plausible neo-schumpeterian non-linearity in the influence of market structure on firms' propensity to innovate: innovation is lower for both low and high levels of concentration, it being higher for intermediate ones. Concentration dynamics is also affected by technological change, though, given that in a situation of neo-schumpeterian competition the relationship between them is double-sided, and the model incorporates this other dimension as well.

Given this non-linearity in the innovation function, desired investment is also non-linear in market concentration, implying that the direction and the intensity of the effect of changes in concentration on capacity utilization, growth and distribution

will depend on the prevalent concentration. The dynamics of these variables, including the latter one, is also affected by demand factors, though, with both capacity and growth rising with the wage share, and concentration falling with the growth rate. Therefore, this paper also contributes to the neo-schumpeterian literature by incorporating effective demand and distributional elements into concentration dynamics.

As it turns out, the stability properties of the system depends on the direction and relative strength of the innovation effects with respect to the demand ones, as well as on the relative bargaining power of workers and capitalists. Basically, the system is seen to be more instability-prone at higher levels of concentration than at lower ones. By examining one possible long-run multiple equilibria dynamics, the paper closes with an analysis of the potential emergence of cyclical behaviour inside a zone of stability.

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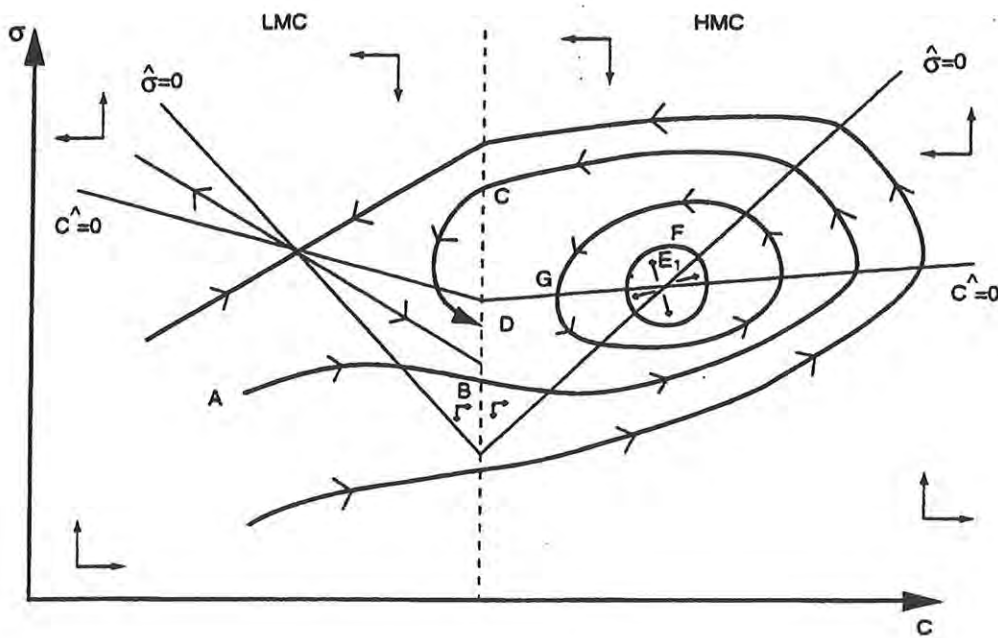
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Figure 1. Phase diagram for multiple equilibria, stability zone and cyclical behaviour



Footnotes

* This is a shortened version of one of the essays collected in Lima (1997), and I am most grateful to Amitava Krishna Dutt for his valuable guidance throughout its elaboration. I also benefited in different ways from useful conversations with Jaime Ros, Gerald Silverberg, Arthur Barrionuevo Filho, Willy Cortez, Peter Skott, Esther-Mirjam Sent, Otaviano Canuto, Ulrich Witt, Esben Andersen and Stan Metcalfe. They should not be implicated in any manner for the final content of this paper, though.

¹ For Kaldor, technical progress is both the cause and the result of economic growth, so that anything which increases the rate of growth also leads to a faster rate of technical change. Kaldor formulated this idea in a variety of ways, ranging from the technical progress function of his early work (1957, 1961), where the rate of growth of labour productivity is positively related to the rate of growth of capital per worker, to the *Verdoorn's Law* of his later writing (1966), where the rate of growth of labour productivity is positively related to the rate of growth of the economy. Arrow's (1962) learning-by-doing approach, in turn, takes productivity as increasing with experience in production, with this experience being measured by cumulative investment -- which, in the absence of depreciation, is given by the capital stock.

² Admittedly, a careful reading of the literature will find no consensual view about whether this hypothesis can actually be traced back to Schumpeter himself. Although Schumpeter paid a great deal of attention to the effects of market structure on innovation, it is not clear whether his views could be captured by a single hypothesis of this kind. But since it is not the purpose of this paper to engage in exegetical disputes, we apply the label Schumpeter-based to several

conceptually consistent and empirically plausible propositions regarding the relationship between market structure and innovation found in the neo-schumpeterian literature.

³ For Nelson and Winter (1982), one way to rationalize the hypothesis that market concentration is conducive to innovation is by saying that the absence of competitors, and the ability to block imitation by competitors, are factors that in their own right influence appropriability conditions. A related but distinguishable argument is the following: absence of competition or restrained oligopolistic competition, by leading to high rates of return in the industry generally, can serve to shelter firms that do innovative R&D in circumstances where, if competition were more aggressive, firms that aim for a 'fast second' would drive the innovators out of business.

⁴ Surveys which ably summarize findings concerning Schumpeter-based hypotheses and related propositions include: Freeman (1982), Kamien and Schwartz (1982), Baldwin and Scott (1987), Cohen and Levin (1989), and Cohen (1995).

⁵ For Steindl (1952), firms hold excess capacity to be ready for a sudden rise in demand. First, the occurrence of fluctuations in demand means that the producer wants to be in a boom first, and not to leave the sales to new competitors who will then press on her market when the boom is over. Second, it is not possible to expand capacity step by step as the market grows due to the indivisibility and durability of the plant and equipment. Finally, entry deterrence is always a concern: if prices are sufficiently high, entry of new competitors becomes feasible even where capital requirements are large; hence, the holding of excess capacity allows oligopolistic firms to confront new entrants by rapidly raising supply, which will push prices down.

⁶ Freeman and Soete (1987) and Verspagen (1990) have shown that localized technological change strongly diminishes the short-run possibilities for factor substitution, there being several characteristics of innovation which work to make it strongly localized: inter-relatedness and complementarities of many technological and organizational innovations, heterogeneity of many production inputs and specificity of particular skills and types of production equipment, and firm-specific nature of much technical innovation and technological accumulation.

Probably the most quoted formalization of localized technological change is still the one by Stiglitz and Atkinson (1969). The underlying idea is that for any industrial grouping the range of efficient techniques is often very small, sometimes reaching one technological system which rules at any point in time. Hence, localized technological change strongly diminishes the short-run possibilities for substitution, with constant improvements of one single production technique usually leading to a Leontief- shaped function.

⁷ An alternative specification of endogenous technological innovation can be found in Lima (1997), where its elaborated a dynamic post keynesian model of capital accumulation and distribution in which labour-saving innovations depend non-linearly on distribution itself. The idea is that the level of distribution determines both the incentives to innovate and the availability of funding to carry it out.

⁸ Harcourt and Kenyon (1973) argues that during expansions firms may want to invest more by generating higher internal savings and hence desire a higher markup. Rowthorn (1977) claims that higher capacity utilization allows firms to raise prices with less fear of being undercut by competitors, who would gain little by undercutting due to capacity constraints. Gordon, Weisskopf and Bowles (1984) argues that marked-up prices are inversely related to the

perceived elasticity of demand, which is a negative function of industry concentration and of the fraction of the firm's potential competitors who are perceived to be quantity-constrained and thus not engaged in or responsive to price competition. In the downturn, markup will fall because the general fall in capacity utilization gives rise to a smaller share of the firm's potential competitors being perceived to be operating under capacity constraints, and hence to an increase in the perceived elasticity of demand facing the firm.

⁹ Alternatively, in post keynesian models of this type the degree of tightness of the labour market is usually measured by the rate of employment (e.g. Skott, 1989; Dutt, 1992, 1994; You 1994A). Now, to use e , the employment rate, L / N , we would have to link it functionally to the state of the goods market as $e = uk$, with k standing for the ratio of capital stock to labour supply in productivity units, $k = K / (N / a)$, and N being the supply of labour. This formal link between u and e would be required because the fixed-coefficient kind of technology implies that an increase in output in the short run will be necessarily accompanied by an increase in employment. Therefore, k would be another (short-run) state variable, in addition to σ and c , and the long-run dynamic analysis below would become three-dimensional -- even in case the growth rate of labour supply were assumed to be exogenously given. In order to save on dimensionality, therefore, the degree of tightness of the labour market is measured here by the rate of change in employment.

¹⁰ Given all these possibilities, the HMC region appears to be more instability-prone than the LMC one. In case an equilibrium is located in the borderline between them, in turn, inspection of eqs. (25)-(28) shows that it will be saddle-point unstable, since $Det(M)$ is negative.

¹¹ Dutt (1994) considers two possibilities in terms of a linear relationship between the rate of capital accumulation and the rate of labour-saving technological change: a variant of Arrow's (1962) learning-by-doing notion that productivity increases with experience in production, an assumption which is also consistent with the idea that increases in productivity can be attained only with the introduction of new machines; and a variant of Schumpeter's (1912) suggestion that when the profit rate falls, so that the accumulation rate falls as well, firms will be pressured to innovate to increase their profits.

PROGRESSO TÉCNICO E NÍVEL DE EMPREGO: O TEOREMA DE KALECKI E O MODELO DE JOAN ROBINSON[#]

Claudia Heller*

Resumo

Michal Kalecki e Joan Violet Robinson estão sem dúvida entre os mais importantes economistas do século XX. Suas contribuições para a teoria econômica contemporânea abordam os mais variados temas, com destaque para as questões relativas ao emprego, à distribuição de renda, à acumulação de capital, ao ciclo econômico e ao desenvolvimento. São quase sempre citados como membros ativos da “revolução keynesiana” e suas obras são freqüentemente estudadas à luz do debate em torno da originalidade de suas idéias - especialmente quando referidas às formuladas na *The General Theory of Employment, Interest and Money* de John Maynard Keynes.

Um tema relativamente pouco enfatizado nestes estudos é o da relação entre o progresso técnico e o nível de emprego. Tanto Kalecki quanto Joan Robinson trataram deste assunto ao longo de suas respectivas obras, embora de forma bastante esparsa e, em geral, em função de questões mais abrangentes, como por exemplo, o crescimento econômico.

O trabalho compara o tratamento dado ao progresso técnico e do seu impacto sobre o nível de emprego segundo a abordagem que os dois autores elaboraram nas respectivas primeiras tentativas de tratar da questão nos marcos de uma teoria do longo prazo. O texto conclui que a despeito de algumas diferenças, as semelhanças são predominantes. Além disso, e especificamente no que se refere às diferenças, o texto também procura mostrar que elas não são incompatíveis, sugerindo a possibilidade de reuni-las e tratá-las num conjunto coerente de proposições teóricas.

Introdução

A relação de amizade, de cooperação acadêmica e de debate intelectual entre Joan Robinson e Kalecki já é bastante conhecida, inclusive pelos inúmeros depoimentos da própria Joan Robinson¹. Embora não haja muitas referências sistematizadas sobre a visão de cada um destes autores sobre o tema em questão, nem eles tenham construído teorias do progresso técnico propriamente ditas - no sentido de uma teoria que contempla não apenas seus efeitos mas também seus determinantes -, é possível identificar alguns marcos importantes que parecem indicar que este era um assunto bastante presente na agenda que ambos compartilharam.

O primeiro destes marcos é constituído pelos ensaios “The long period theory of employment” (Robinson, 1936) e “A theorem of technical progress” (Kalecki, 1941) e é particularmente interessante porque representa as primeiras tentativas dos autores para considerar

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¹ Um excelente trabalho é o de Feiwel (1989)

problemas de longo prazo em suas respectivas teorias. Além disso, ambos estiveram diretamente envolvidos um com o outro nestes trabalhos: Kalecki leu uma primeira versão do ensaio de Joan Robinson e seus comentários foram por ela incorporados nas versões seguintes. Joan Robinson, por sua vez, travou um debate com John Maynard Keynes (no qual Nicholas Kaldor também participou) suscitado pela submissão do trabalho de Kalecki para publicação no *The Economic Journal*, que era dirigido por Keynes.

Os comentários de Kalecki ao ensaio de Joan Robinson estão registrados em duas cartas, uma datada de 3 de outubro de 1936 e outra de 5 de novembro de 1936, ambas publicadas nos *Collected Works of Michal Kalecki* como “notas editoriais” à reprodução da resenha intitulada “Some remarks on Keynes’s theory”². Entre as duas datas, Kalecki esteve em Cambridge para proferir uma palestra no King’s College - mais precisamente no “Political Economy Club” dirigido por Keynes (Joan Robinson, embora não fosse membro, foi convidada não apenas para ouvir a palestra, como também para apresentar Kalecki à audiência). O debate entre Joan Robinson, Keynes e Kaldor em torno do ensaio de Kalecki encontra-se igualmente publicado nos *Collected Works of Michal Kalecki*³.

Pode-se dizer que o segundo marco se caracteriza pela influência exercida pelo *Studies in Economic Dynamics* (Kalecki, 1943) sobre *The Rate of Interest and Other Essays* (Robinson, 1952). Mas, ao mesmo tempo em que se inspirava nos debates do chamado “War Circus”, Joan Robinson envolveu-se na “Controvérsia do Capital”. Foi à luz destes dois debates, e baseada também na sua leitura de Marx, que ela reviu seus argumentos e refez não apenas sua classificação do progresso técnico, mas sua própria concepção dos efeitos do progresso técnico sobre o nível de emprego. Kalecki, por sua vez, passou os anos da II Guerra Mundial em Oxford envolvido com estudos sobre a economia de guerra, e de 1946 a 1954 trabalhou no Secretariado das Nações Unidas em New York. No departamento econômico da ONU foi responsável por inúmeras pesquisas sobre a economia mundial (publicadas nos *World Economic Reports*), passando a interessar-se pelos problemas do subdesenvolvimento. Do ponto de vista estrito do tema deste trabalho, esta fase se caracteriza pela formulação das primeiras idéias que viriam a se consubstanciar na “pseudo-função de produção”, por Joan Robinson, e na “curva de produção”, por Kalecki. São duas construções bastante complexas, cada qual elaborada visando resolver problemas de natureza diferenciada, mas que guardam entre si semelhança suficiente para que se possa considerá-las um marco de mútua influência⁴. Vale dizer que apesar de terem desenvolvido estes instrumentais de modo aparentemente

² Trata-se de Kalecki (1936), resenha de *The General Theory of Employment, Interest and Money*.

³ Doravante citados como CWMK.

⁴ Uma das diferenças importantes é que Kalecki só usou a “curva de produção” para analisar o crescimento em economias socialistas, isto é, com planejamento central. Ver a este respeito Feiwel (1975: 311-317) e Sawyer (1985:

independente, há registro de cooperação e troca de idéias entre os autores, como se pode constatar, por exemplo, pelos comentários de Kalecki a uma versão preliminar do livro *The Rate of Interest and Other Essays* (1952), de Joan Robinson, encontradas numa carta datada de 26 de junho de 1951, e pelo depoimento dado por Joan Robinson ao número especial do *Oxford Bulletin of Economics and Statistics* em homenagem a Kalecki, em que relata brevemente alguns pontos básicos de sua discordância com o homenageado, entre eles os que dizem respeito à função investimento e ao papel das inovações⁵.

Há vários outros episódios deste tipo, e inúmeros outros aspectos da obra de Joan Robinson e de Kalecki que poderiam ser tratados de forma comparativa - e a literatura é rica em estudos desse gênero. O texto a seguir, entretanto, limita-se ao primeiro destes marcos, isto é, às primeiras tentativas, tanto de Joan Robinson quanto de Kalecki, de tratar o problema do progresso técnico nos marcos de uma teoria do longo prazo.

É importante que se esclareça que as referências usadas correspondem à versão publicada na edição de 1947 dos *Essays on the Theory of Employment* (no caso do ensaio de Joan Robinson) e nos *Collected Works of Michal Kalecki* (no caso do ensaio de Kalecki). Isto porque a primeira versão do trabalho de Joan Robinson (publicada na *Zeitschrift für Nationalökonomie*) sofreu alterações ao longo do tempo, algumas delas decorrentes justamente do seu debate com, entre outros, Kalecki. Quanto ao ensaio de Kalecki, a versão original e as possíveis versões intermediárias - se é que chegaram a ser refeitas em função do debate com Keynes, Kaldor e Joan Robinson - parecem ter desaparecido, uma vez que não há referências a elas nas notas editoriais que acompanham sua reprodução nos *CWMK*.

Uma última observação deve ser feita quanto ao sistema de notação: usamos no texto a seguir W para salário, P para lucro, Y para produto (ou renda), sendo que Y^P representa o produto (ou renda) potencial. K representa capital e L trabalho. Os subscritos "1" e "2" se referem aos valores antes e depois da introdução das inovações (no caso de Joan Robinson). Os subscritos "0", "1" e "2" indicam os períodos de curto prazo e o asterisco * caracteriza o "sistema de referência" (no caso de Kalecki). Além disso, p representa preço e i representa taxa de juros. Finalmente, os sobrescritos I e II indicam o setor de bens de capital e o setor de bens de consumo respectivamente.

253-256). Para uma avaliação crítica do papel do progresso técnico na análise do crescimento e do ciclo econômico em economias capitalistas "sem governo" - segundo Kalecki - ver Gomulka, Ostaszewski & Davies (1990).

⁵ A carta de Kalecki foi publicada na íntegra em *CWMK*, II: 538-541. O depoimento de Joan Robinson encontra-se em Robinson (1971) e em Robinson (1977).

1 - Kalecki comenta “The long period theory of employment” (Robinson 1936)⁶

O primeiro trabalho em que Joan Robinson trata do progresso técnico intitula-se “The long period theory of employment” (1936). Publicado originalmente na *Zeitschrift für Nationalökonomie*, antes mesmo da publicação de *The General Theory*⁷ e reproduzido (com modificações) nas diferentes edições do livro *Essays in the Theory of Employment* (1937), era “an attempt to apply the principles of Mr. Keynes’s *General Theory of Employment, Interest and Money* to a number of particular problems” (Robinson, 1937: v). O ensaio, como o próprio título sugere, tinha por objetivo desenvolver uma teoria do emprego de longo prazo e, particularmente, tratar do duplo caráter do investimento, isto é, como demanda e como criação de capacidade produtiva. De todos os ensaios que compõem o livro, é o mais importante, tendo sido considerado a *pièce de résistance* do volume⁸ e é, até hoje, tema de controvérsia⁹.

A concepção de que a teoria do emprego de longo prazo deve considerar os efeitos do investimento não apenas como componente da demanda agregada, isto é, do gasto, mas também em sua qualidade de criador de capacidade produtiva, decorre do fato de que no longo prazo, por definição, o “estoque de capital” não é fixo. Isto tem implicações analíticas importantes, pois a relação entre investimento e nível de emprego deixa de ser direta e inequívoca.

O argumento central de Joan Robinson pode ser resumido da seguinte maneira: na teoria de Keynes, que se refere fundamentalmente ao curto prazo, uma queda da taxa de juros tende a incentivar a criação de emprego, na medida em que eleva, relativamente, a eficiência marginal do capital (o retorno esperado do investimento) e ao mesmo tempo barateia o custo deste investimento¹⁰. Mas, como no curto prazo se supõe (por definição) que o “estoque de capital” é fixo - ou seja, que o investimento líquido é nulo - a redução da taxa de juros (sob o pressuposto de existência de capacidade ociosa e de mão de obra disponível) tem por efeito apenas a elevação da produção e do nível de emprego. O emprego e a renda crescem, e o nível da capacidade ociosa decresce, pois este é o único modo de aumentar a produção com estoque de capital fixo.

No longo prazo, entretanto, uma queda da taxa de juros implica não apenas a ocupação da capacidade ociosa, mas também a possibilidade de investimento líquido positivo em bens de capital. O problema é que os novos bens de capital podem ser substitutos de mão-de-obra nos setores e ramos em que são utilizados e nestes, portanto, o nível de emprego pode cair. Por outro lado, é

⁶ A descrição do trabalho de Joan Robinson apoia-se fortemente na primeira seção de Heller (1998b).

⁷ Cf. Kregel (1983: 343, n1).

⁸ Cf. Harrod (1937)

⁹ Veja-se, por exemplo, a crítica de Garegnani (1996) à interpretação de Kregel (1983) sobre este ensaio.

¹⁰ Mesmo levando-se em conta a proposição de Keynes de que a eficiência marginal do capital decresce com a acumulação de capital, o raciocínio não fica invalidado.

possível que o nível de emprego aumente devido à própria expansão do setor e ramos produtores de bens de capital. Estes efeitos contrários podem, ou não, anular-se mutuamente. Isto significa, segundo Joan Robinson, que não é possível prever os efeitos de uma redução da taxa de juros sobre o emprego de longo prazo sem que se avalie, por um lado, a possibilidade de que haja substituição de trabalho por capital, e, por outro, os efeitos da alteração do nível de emprego sobre a distribuição da renda e a propensão a consumir.

O mesmo procedimento analítico utilizado para avaliar os efeitos de longo prazo de uma alteração da taxa de juros é utilizado com referência a alterações da propensão a poupar, da política fiscal, do tamanho e composição etária da população, do grau de monopólio e do progresso técnico. Particularmente no que se refere ao progresso técnico, Joan Robinson propõe uma taxonomia das “invenções” (entendida como “inovações”, mas restrita a novos métodos de produção, ou seja, excluindo as que geram novos produtos finais de consumo), classificadas em “neutras”, “poupadoras de capital” e “poupadoras de trabalho”, segundo um critério que compara a participação relativa do trabalho e do capital no produto (ou na renda), antes e depois da introdução das “invenções”.

Sua classificação serve a três propósitos simultâneos, mas de importância crescente, uma vez que o objeto central de sua preocupação está referido ao nível de emprego de longo prazo. Assim, o caráter neutro ou viesado das inovações se relaciona a: (i) alteração (ou não) da distribuição da renda; (ii) alteração (ou não) do nível de renda (produto); (iii) alteração (ou não) do nível de emprego. Pelo primeiro critério, o da distribuição da renda, uma “inovação neutra” é aquela que não afeta as parcelas relativas da renda ($W_2/Y_2 = W_1/Y_1$ e $P_2/Y_2 = P_1/Y_1$), enquanto que uma “inovação poupadora de capital” reduz a participação relativa do lucro e aumenta a do salário ($W_2/Y_2 > W_1/Y_1$ e $P_2/Y_2 < P_1/Y_1$), e uma “inovação poupadora de trabalho” reduz a participação relativa do salário e aumenta a do lucro na renda agregada ($W_2/Y_2 < W_1/Y_1$ e $P_2/Y_2 > P_1/Y_1$)¹¹.

Embora as inovações, em geral, tendam a elevar o nível de produto ($Y_2 > Y_1$), seus efeitos de longo prazo dependem também dos seus efeitos sobre a distribuição da renda. Este passo do seu raciocínio repousa fortemente sobre o conceito de propensão a consumir e o pressuposto de que as classes de nível de renda inferior têm maior propensão a gastar (ou menor a poupar). Assim, uma inovação poupadora de capital, que reduz a participação do lucro na renda (e eleva a do salário),

¹¹ Paralelamente, uma inovação “neutra” afeta a eficiência da produção igualmente em todos os estágios (setores), de modo que o produto *per capita* na produção de equipamentos de capital se eleva igualmente ao produto *per capita* na produção de bens finais, e o capital por unidade de produto é o mesmo que antes. Ou seja: $\Delta(Y^I/L^I) = \Delta(Y^II/L^II)$ e $K_2/Y_2 = K_1/Y_1$. Uma inovação “poupadora de capital” aumenta a eficiência na produção de bens de capital mais do que na de bens finais e reduz o montante de capital por unidade de produto. Em outras palavras: $\Delta(Y^I/L^I) > \Delta(Y^II/L^II)$ e $K_2/Y_2 < K_1/Y_1$. Uma inovação “poupadora de trabalho” (ou “intensiva em capital”) aumenta o montante de capital por unidade de produto. Note-se que neste caso não há referência ao que ocorre com a eficiência da produção em um setor relativo ao outro, e que a inovação “poupadora de trabalho” é descrita apenas por $K_2/Y_2 > K_1/Y_1$. Esta questão foi ressaltada por Kalecki.

tende a elevar o produto, uma vez que reduz a propensão “agregada” a poupar (ou eleva a propensão a consumir); analogamente, uma inovação poupadora de trabalho, que reduz a participação dos salários na renda (e eleva a do lucro), tende a reduzir o produto, pois eleva a propensão “agregada” a poupar (ou reduz a propensão a gastar). Em suas palavras:

"The effect of inventions upon the equilibrium level of output will depend upon its reaction on the distribution of income. An invention which reduces the share of labour in a given income will reduce the equilibrium level of output by increasing thriftiness, while an invention which increases the share of labour will increase equilibrium output. Thus capital-saving inventions increase, and capital-using inventions decrease, the equilibrium level of output". (Robinson, 1936, ETE: 96)¹².

Entretanto, segundo Joan Robinson, o efeito final sobre o nível de emprego de longo prazo depende não apenas das considerações anteriores, mas também da combinação de dois fatores adicionais: a possibilidade de “aprimoramento da técnica”, definida como elevação do nível do produto sem alteração da quantidade de fatores utilizados ($Y_2 > Y_1$ com $K_2 = K_1$ e $L_2 = L_1$) e a possibilidade de “intensificar o capital”, isto é, elevar a relação capital/trabalho ($K_2/L_2 > K_1/L_1$). Quando presentes os dois processos (o aprimoramento e a intensificação), eles tendem, conjuntamente, a elevar a relação produto/trabalho ($Y_2/L_2 > Y_1/L_1$), reduzindo o emprego relativo. Portanto, as conseqüências sobre o nível de emprego dependem também da nova “combinação de insumos” consubstanciadas nas inovações. Reunidas às considerações sobre seus efeitos sobre a distribuição da renda, Joan Robinson conclui que não é possível determinar, de antemão, seu impacto sobre o nível de emprego de longo prazo.

Se as inovações tendem, em geral, a elevar o nível do produto mas não necessariamente do emprego, o investimento, em geral, tende a elevar tanto o produto quanto o emprego. Mas o investimento que incorpora inovações excessivamente “poupadoras de mão de obra” tende a reduzir o emprego tanto por seus efeitos mais imediatos sobre a redução relativa do número de trabalhadores empregados (que seriam substituídos) quanto por seus efeitos mais indiretos, na medida em que a participação do salário na renda agregada se reduz. Por outro lado, se nem todo investimento implica inovação, todas as inovações implicam investimento, isto é, criação de nova capacidade produtiva. Assim, mesmo as “intensivas em capital” (desde que não excessivamente e desde que não se dirijam apenas à substituição de equipamentos sucateados), que elevam a participação dos lucros na renda, e que portanto, mediante a elevação da propensão a poupar da comunidade, reduzem o produto, podem ser acompanhadas de investimento líquido positivo - e elevação do nível de emprego. Assim, Joan Robinson conclui que enquanto o investimento não cessa, há um primeiro efeito - positivo - sobre o nível de emprego, e que este efeito pode ser mantido

¹² Deve-se esclarecer que o termo “nível de equilíbrio” do produto refere-se ao estado do sistema econômico depois que todos os efeitos das inovações tenham se realizado plenamente.

através de um fluxo razoavelmente permanente de inovações de qualquer tipo. É interessante citar suas próprias palavras:

"The immediate effect of inventions upon employment depends upon the extent to which equipment is the product of net investment and not merely the result of using the amortisation funds of old plant to set up new plant. In general we may suppose that, except when inventions are highly capital-saving, a period of positive net investment will result from them [...], for all except the most capital-saving require an increase in capital per head, while the reduction in total output which results from increased thriftiness will not be immediately foreseen. The first effect of inventions, therefore, is likely to be an increase in employment, even when in the long run they will reduce it, and a sufficiently rapid succession of inventions, provided they are not extremely capital-saving, would prevent the rate of investment from ever falling to zero." (Robinson, 1936, ETE: 97-98).

Joan Robinson conclui que o progresso técnico não é, necessariamente, causador de desemprego. A ele deve ser imputada esta responsabilidade apenas no caso em que seja mera reposição de estoque de capital sucateado (investimento líquido nulo), e/ou "excessivamente poupador de trabalho". Esta situação seria, segundo Joan Robinson, muito excepcional.

Das quase quarenta resenhas que o livro *Essays in the Theory of Employment* recebeu, há uma que merece destaque, pois exerceu grande influência sobre a Autora e, pode-se dizer, induziu-a a desenvolver uma linha de análise que embora parecesse promissora, acabaria por se mostrar muito complexa e insatisfatória. Trata-se da resenha de Harrod, publicada no *Economic Journal* em junho de 1937. Mais do que uma resenha, Harrod levantou várias questões que considerava problemáticas. A mais importante delas refere-se justamente à passagem acima citada. Ele cobrava da Autora a explicitação de como se deveria medir o "volume de capital" (ou "estoque de capital"):

"Mrs. Robinson divides inventions into labour-saving, neutral and capital saving [...]. Unfortunately, this definition is ambiguous without the provision of a precise measure of the volume of capital. Since the problem is a long-period one, the capital may be conceived to be physically re-constituted; how is the amount of the new capital to be measured to ensure that it is the same as the old? Should a unit of capital be conceived as waiting in respect of a unit of commodities per unit period or waiting in respect of a unit of labour? If an improvement in technique occurs, the rate of re-investment required to keep a given volume of capital intact will differ according to which measure is used. Reference to money values will not avoid the ambiguity, since we may suppose stable prices, prices falling as factor productivity rises, etc." (Harrod, 1937: 328-329, grifos nossos).

Esta crítica de Harrod foi fundamental para o desenvolvimento posterior dos argumentos de Joan Robinson. A frase (por nós) grifada exigia da Autora uma forma de medir, com maior precisão, não apenas o "valor do capital" mas também os impactos do progresso técnico sobre a distribuição e o nível da renda, bem como sobre o nível do emprego, que ela descrevia apenas verbal e intuitivamente. A tentativa de responder a esta questão - isto é, de passar da intuição a uma análise formalmente mais rigorosa - acabou levando-a a buscar uma reformulação da função de produção que lhe fosse útil, e a discutir o significado e a medida do capital, temas da famosa "controvérsia de

Cambridge”¹³.

Na mesma resenha crítica, Harrod propõe uma classificação das inovações segundo seus efeitos diretos sobre a razão capital/produto (K/Y), e estabelece uma relação de causalidade quanto aos seus efeitos sobre o nível de emprego diferente da sugerida por Joan Robinson. Enquanto para ela as inovações são classificadas pelo critério da distribuição da renda e esta passa a ser o fator determinante da variação do produto e do nível de emprego no longo prazo (através do princípio da demanda efetiva), para Harrod é a variação do produto que determina a distribuição da renda e conseqüentemente o nível de emprego. No argumento de Harrod, se a inovação aumenta a relação capital/produto ($K_2/Y_2 > K_1/Y_1$), a participação dos salários na renda deve cair ($W_2/Y_2 < W_1/Y_1$), e conseqüentemente o nível de emprego se reduz. Analogamente, se a inovação reduz a relação capital/produto ($K_2/Y_2 < K_1/Y_1$), a participação dos salários na renda se eleva ($W_2/Y_2 > W_1/Y_1$) e o nível de emprego aumenta; o nível de emprego permanece o mesmo se não houver variação da relação capital/produto ($K_2/Y_2 = K_1/Y_1$), e neste caso não há alteração da distribuição da renda ($W_2/Y_2 = W_1/Y_1$)¹⁴.

A literatura considera que a resposta de Joan Robinson às críticas de Harrod com relação à medida do volume de capital encontra-se no artigo intitulado “The classification of inventions” (1937-38), publicado na *Review of Economic Studies*, onde ela sugere que o capital seja medido em termos de custo, de modo que dois estoques de capital são considerados iguais quando custam a mesma coisa¹⁵. Como as invenções não destroem o conhecimento adquirido e acumulado, e ao mesmo tempo criam novos tipos de bens de capital, ela sugere que a medida, além de ser tomada em

¹³ Neste sentido, o debate com Harrod é uma primeira contribuição nesta controvérsia. Para uma defesa desta interpretação veja Heller (1996), especialmente o terceiro capítulo.

¹⁴ O quadro abaixo - reproduzido de Heller (1998b) - compara as duas proposições, explicitando que a classificação de Joan Robinson se baseia na distribuição da renda, enquanto que a de Harrod se apoia na relação capital/produto, uma espécie de “coeficiente técnico”. A última linha (“impacto sobre o emprego”) mostra que, numa primeira aproximação, isto é, desconsiderando-se as questões relativas, por exemplo, à propensão a consumir, as duas definições parecem levar à mesma conclusão.

CLASSIFICAÇÃO DO PROGRESSO TÉCNICO SEGUNDO ROBINSON (1936) e HARROD (1937)			
	Neutra	Poupadora de Capital	Poupadora de Trabalho
Robinson (1936)	$W_2/Y_2 = W_1/Y_1$ e $P_2/Y_2 = P_1/Y_1$	$W_2/Y_2 > W_1/Y_1$ e $P_2/Y_2 < P_1/Y_1$	$W_2/Y_2 < W_1/Y_1$ e $P_2/Y_2 > P_1/Y_1$
Harrod (1937)	$K_2/Y_2 = K_1/Y_1$	$K_2/Y_2 < K_1/Y_1$	$K_2/Y_2 > K_1/Y_1$
impacto sobre emprego	não se altera	elevação	redução

¹⁵ É provável que ela também responda a estas críticas nas demais versões (modificadas) do “The long run theory of employment” publicadas nas várias edições dos *Essays in the Theory of Employment*. Uma análise mais minuciosa implicaria comparar estas versões, além de considerar a correspondência entre Roy Harrod e Joan Robinson, da qual, sobre o tema específico e segundo Besomi (1995), só sobreviveram quatro cartas, três de Joan Robinson (guardadas no Arquivo da Chiba University of Commerce) e uma de Harrod (guardada no Modern Archive Centre do King’s College, na Cambridge University). Haveria ainda que levar em conta a correspondência entre Joan Robinson e Keynes em torno dos critérios de classificação do progresso técnico. Estas cartas discutem os critérios propostos por Joan Robinson à luz dos utilizados por Hicks e os sugeridos por Harrod. Foram escritas entre setembro e outubro de 1937 e

termos de custos, tome como referência o bem de capital mais eficiente. Mas explicita que ainda assim permanecem certas ambigüidades, dando o primeiro indício de reconhecimento das dificuldades que envolvem a “medida do capital”¹⁶. Ainda neste mesmo artigo, Joan Robinson “traduz” a classificação proposta por Harrod em termos da elasticidade de substituição entre fatores e aceita a classificação por ele sugerida¹⁷. Isto se deve ao objetivo comum (de ambos os autores) de estabelecer as bases de uma teoria (keynesiana) de longo prazo, mas empobreceu drasticamente sua abordagem da questão. O debate, entretanto, não se esgotou e permaneceu uma diferença importante entre eles, que se revela no predomínio das atenções de Joan Robinson com as questões relativas à distribuição da renda e ao emprego, que tinham importância bem menor para Harrod¹⁸.

As críticas de Kalecki estão registradas nas cartas mencionadas na introdução a este trabalho. Na primeira delas Kalecki sugere que Joan Robinson considere que na ausência de uma alteração na parcela poupada da renda dos capitalistas, é possível que o sistema se desenvolva sem qualquer outro impedimento além da oferta de mão de obra. É preciso chamar a atenção para o fato do argumento de Kalecki não tratar propriamente da distribuição da renda entre salários e lucros, mas apenas da parcela poupada pelos capitalistas na renda dos próprios capitalistas. É esta particularidade que permite supor que neste caso tanto o investimento quanto a renda dos capitalistas (o lucro) possam crescer ano a ano, assim como o estoque de capital e o produto total, mantendo os preços e a taxa de juros constantes.¹⁹ O único impedimento a este processo, segundo Kalecki, seria a taxa de crescimento da mão de obra: “If the population grows in the same or greater proportion nothing will stop this development. If the growth of population is slower (or the population is constant) the development will come after a certain time to the end” (CWMK, I: 503). O que é especialmente interessante, é que, segundo Kalecki, o que impede a continuidade do crescimento econômico neste caso não é a queda da eficiência marginal do capital decorrente do processo de acumulação, e sim a escassez de mão de obra, que pressionaria por uma elevação dos salários nominais e dos preços, forçando uma elevação da taxa de juros.

referem-se a um texto que o próprio Modern Archive Centre do King's College em Cambridge não é capaz de identificar com precisão, embora sugira tratar-se de uma revisão do “The long period theory of employment”.

¹⁶ Veja-se Robinson (1937-38: 139, 3n)

¹⁷ Supondo a existência de apenas dois fatores de produção, trabalho e capital, e descrevendo duas situações - uma antes e outra após a inovação - através de duas curvas de produtividade média do capital e duas curvas de produtividade marginal do capital (para um dado montante fixo de trabalho), e suas respectivas elasticidades, Joan Robinson mostra que as duas classificações são compatíveis: quando a elasticidade de substituição entre fatores é igual à unidade, as inovações são neutras; quando é menor do que a unidade as inovações são poupadoras de trabalho e quando maior do que a unidade, as inovações são poupadoras de capital. Mas veja-se a nota 11 acima, que prescinde do argumento baseado na elasticidade-substituição.

¹⁸ De acordo com Besomi (1995), o debate entre Joan Robinson e Harrod incluiu ainda a questão dos efeitos do progresso técnico sobre o nível de preços.

¹⁹ Kalecki parece supor que os “trabalhadores gastam o que ganham”, de modo que o único que interessa - de acordo com a máxima de que “os capitalistas ganham o que gastam” - é que não alterem a parcela gasta da sua renda.

Na segunda carta Kalecki aponta alguns dos problemas que permanecem sem solução na proposta de Joan Robinson²⁰. Escreve que depois de ter pensado algumas horas sobre “o problema das invenções”, chegou à lamentável (“regrettable”) conclusão de que o problema era mais complexo do que havia imaginado pois está relacionado ao problema da medida de capital²¹.

Segundo Kalecki, embora seja possível medir o capital usando como deflator um índice de preços para bens de investimento, este índice pode alterar-se em decorrência de uma invenção específica e conseqüentemente a medida do capital muda sem que necessariamente isto reflita alteração de sua produtividade, mas apenas a variação do preço que serviu de deflator. Isto só não ocorreria se a invenção fosse do tipo “neutra”, pois neste caso a variação de preço dos bens de investimento seria a mesma que a variação dos preços em geral e o reflexo seria refletido igualmente na produtividade do trabalho; no caso de uma inovação “poupadora de trabalho”, a variação relativa entre o preço que serve como deflator para a medida do capital e o nível geral de preços seria compensada pelo fato deste tipo de inovação engendrar um uso mais intensivo de capital do que de trabalho, ocorrendo o inverso no caso de uma inovação “poupadora de capital”, de modo que as respectivas produtividades poderiam voltar à igualdade²². Mas, segundo Kalecki, exceto no caso de inovações “neutras”, nada se pode afirmar sobre a participação relativa do trabalho (e do capital): “whether the share of labour will increase or fall depends again also on the elasticity of substitution in the new situation” (CWMK, I: 504).

O raciocínio acima é o que leva Kalecki a sugerir que se deve supor que o progresso técnico não seja representado por uma invenção isolada, mas que afete todos os preços de bens de consumo e de bens de investimento na mesma proporção. Além disso, argumenta que é preciso distinguir o conceito de invenção (isolada) do de progresso técnico (generalizado), por causa dos efeitos que uma invenção específica no setor de investimento provoca nos demais setores: “the difference between the separate invention and technical progress is due to the fact that an invention in an investment goods industry causes a change in methods used in the industries buying its product”

²⁰ Segundo Osiatynski (1986) esta carta se refere à versão preliminar do “Classification of inventions” e não ao “The long period theory of employment”, mas nos CWMK, organizados pelo mesmo Osiatynski, esta indicação não se repete. Também aqui uma análise minuciosa implicaria uma comparação das diferentes versões do “The long period theory of employment” (cf. nota 15 acima), além das duas versões do “Classification of inventions”. Entretanto, não há registro de que a primeira versão deste último tenha sobrevivido, e embora haja uma indicação da existência de de uma carta anterior à de 5 novembro de 1936 (de Kalecki para Joan Robinson, cf. o próprio Kalecki), as referidas notas editoriais dos CWMK informam que ela está desaparecida.

²¹ Kalecki propõe que se denote a função de produção por $f(c,l)$, onde “c” e “l” correspondem, respectivamente, às quantidades de capital e de trabalho por unidade de produto, e que se meça o capital pelo seu valor dividido por um índice de preços de bens de capital “ p_c ”, atribuindo ao índice geral de preços a notação “p”. Além disso, “i” representa a taxa de juros e “w” representa a unidade de salários, de modo que as produtividades marginais do capital e do trabalho são respectivamente $df/dc = ip_c/p$ e $df/dl = w/p$.

²² Ou seja, a diferença ente Δp_c e Δp seria compensada pelo uso mais intensivo de “c” ou de “l”, refletindo-se em respectivamente em “i” e em “w” de modo que a igualdade $ip_c/p = w/p$ se restauraria. (notação original de Kalecki).

(CWMK I: 505)²³.

Finalmente, e ainda nesta mesma carta, Kalecki chama a atenção para a possibilidade do progresso técnico poupar trabalho mesmo que nenhuma das invenções seja por si só “poupadora de trabalho”: “it is interesting that the technical progress saves labour also if all [the] inventions are not ‘labour saving’, if they only increase the marginal productivity of capital” (CWMK I: 505), e ressalta que qualquer invenção tem como efeito de curto prazo uma elevação do investimento: “as regards the short time effects of invention [...] initially they must, I think, always increase the gross investment expressed in wage units because of the rise of marginal efficiency of capital (the Keynesian “I” is gross investment)” (CWMK I: 505).

Não há registro de resposta de Joan Robinson a estas duas cartas (nem à que Kalecki menciona na segunda), embora haja claras evidências de que ela as levou em consideração, começando pela própria reprodução do “The long period theory of employment” nos seus *Essays on the Theory of Employment*, na qual adicionou uma nota de agradecimento a Kalecki (Robinson, 1936e, ETE: 95, n3). Como se verá em seguida, Kalecki tentaria considerar pelo menos alguns destes aspectos no seu próprio teorema.

2 - Joan Robinson defende “A theorem of technical progress” (Kalecki 1941)

“A theorem of technical progress” foi submetido para publicação ao *The Economic Journal*, que era dirigido por Keynes, e gerou uma importante e reveladora correspondência entre Keynes, Joan Robinson, e Nicholas Kaldor²⁴.

O objetivo central de Kalecki, neste ensaio, era avaliar os efeitos do progresso técnico sobre o desenvolvimento econômico. Ele tomou como ponto de partida um modelo simplificado de uma economia fechada, em que vigoram a concorrência imperfeita e o oligopólio e na qual as firmas operam com curvas de custo marginal de curto prazo horizontais para o horizonte relevante de produção. Apesar de se tratar de um modelo de longo prazo, Kalecki supôs que a economia não opera a plena capacidade devido às economias de larga escala que “prevent firms from reducing the size of the plant” (Kalecki, 1941, CWMK II: 108, n2)²⁵. Além disso, os trabalhadores não poupam, e

²³ Ver nota 11 acima

²⁴ Esta correspondência foi publicada nos CWMK, II: 530-536.

²⁵ Vale notar que neste teorema a existência de capacidade ociosa decorre de questões técnicas, e não do seu caráter capitalista ou socialista. Segundo Kalecki, considerações sobre o grau de utilização da capacidade produtiva é um dos elementos que distinguem os dois tipos de economias: nos modelos construídos para economias socialistas (com planejamento central) a capacidade produtiva é totalmente utilizada (por determinação dos planejadores), ao contrário das economias capitalistas, em que o grau de utilização da capacidade produtiva é determinado por decisões

os desempregados são mantidos com os salários dos empregados.

O início do ensaio apresenta uma lista dos cinco principais efeitos do progresso técnico: (i) elevação da produtividade média do trabalho; (ii) alteração da razão entre a capacidade máxima de um equipamento e o montante de capital nele contido; (iii) elevação do grau de monopólio; (iv) redução do nível geral de preços; (v) manutenção do incentivo a investir num nível mais alto do que seria sem progresso técnico. (Kalecki, 1941, CWMK II: 108-109)²⁶.

Ressalte-se que por “montante de capital” Kalecki entende o “capital real” definido como custo de reprodução deflacionado pelo índice de preços dos bens de investimento: “the reproduction cost of the plant deflated by the index of prices of investment goods” (CWMK, II: p. 108). Isto significa que adota a medida que havia sugerido a Joan Robinson em seus comentários ao “The long period theory of employment”.

Os cinco efeitos estão inter-relacionados: a elevação do grau de monopólio, que decorre do fato do progresso técnico contribuir para a elevação da concentração industrial, pode contrabalançar - mas não necessariamente anular - a tendência à redução do nível geral de preços. Esta tendência, por sua vez, decorre da elevação da produtividade do trabalho - que reduz os custos marginais em termos nominais para uma dada taxa de salário. Por outro lado, a produtividade média do trabalho, que tende a se elevar como decorrência do progresso técnico, depende também do grau de utilização do equipamento, isto é, da razão entre produto e máxima capacidade produtiva - a que Kalecki atribui o símbolo “ u ” (que descreveremos por Y/Y^P).²⁷

Kalecki define como “ c ” a razão entre a capacidade produtiva e o “capital real” (que denotaremos por Y^P/K). Esta razão pode modificar-se em função de inovações tecnológicas e estas alterações servem de critério para a definição de três categorias básicas de progresso técnico: se esta

Os quatro primeiros efeitos são cumulativos, no sentido de que dependem tanto do ritmo do progresso técnico quanto da extensão do período durante o qual ele ocorre. O efeito do progresso técnico sobre o incentivo a investir, entretanto, depende apenas da capacidade das novas invenções em elevar a taxa esperada de lucro em atividades específicas, ou seja, além de não ser cumulativo, tende a esgotar-se.

Para Kalecki, a rigor, os efeitos do progresso técnico sobre o grau de monopólio, o nível geral de preços e o incentivo a investir podem ser considerados colaterais pois influenciam o desenvolvimento econômico de forma apenas indireta: a elevação do grau de monopólio tende a reduzir a participação dos salários na renda; a redução do nível geral de preços tende a reduzir a demanda por moeda líquida e portanto a reduzir a taxa de juros; e o estímulo das novas invenções sobre o investimento tende a manter alta a demanda efetiva, mas apenas durante algum tempo. Os efeitos realmente cruciais para a análise do desenvolvimento econômico são os dois primeiros (alteração da produtividade média do trabalho e alteração da razão entre capacidade produtiva e “capital real”), pois estes afetam a técnica de produção, influenciam o volume de emprego e modificam a estrutura do equipamento de capital.

Para analisar estes dois efeitos cruciais sem a influência dos efeitos “colaterais”, Kalecki utiliza o que denomina de “sistema de referência”. É interessante notar que ele se apoia explicitamente em Joan Robinson - e particularmente no ensaio “The long period theory of employment” - mencionando que ela também utilizou pressupostos simplificadores, tais como a hipótese de taxa de juros dada (eliminando, assim, a influência do nível geral de preços) e a desconsideração das alterações do grau de monopólio (Kalecki, 1941, CWMK II: 110, n4).

O “sistema de referência” é construído de modo a isolar os efeitos cruciais dos efeitos colaterais do progresso técnico. Assim, enquanto no “sistema real” as novas invenções incentivam o investimento em determinados setores, no “sistema de referência” o investimento nestes mesmos setores é estimulado, no mesmo montante e mesma proporção, por um maior otimismo por parte dos empresários. Além disso, enquanto no “sistema real” o progresso técnico altera o custo de um tipo específico de trabalho, no “sistema de referência” esta alteração é descrita apenas por uma mudança, na mesma proporção, das taxas salariais. Em ambos os sistemas vigora a mesma estrutura industrial (com imperfeições de mercado e grau de monopólio), de modo que a custos marginais iguais correspondem preços iguais.

Construído desta forma, o “sistema de referência” fica imune à elevação da produtividade do trabalho e à queda da razão entre capacidade produtiva e o capital - os efeitos cruciais do progresso

considere estas variações em termos relativos e não somente em termos absolutos. Por exemplo: o progresso técnico intensivo em capital seria aquele que eleva K mais do que eleva Y^P ($\Delta K > \Delta Y^P$ com $\Delta K > 0$ e $\Delta Y^P > 0$) e o progresso

técnico. Estes ficam “isolados” no “sistema real” e se tornam passíveis de observação por meio da comparação entre o que ocorre nos dois sistemas quando apenas um sofre os efeitos do progresso técnico.

A análise é de longo prazo, e este longo prazo é subdividido em vários curtos prazos. No período inicial ($t = 0$), ambos os sistemas são idênticos no que se refere ao equipamento de capital, ao volume de produção, ao nível dos salários, ao nível de preços, à taxa de juros vigente e às decisões de investir. A única diferença é que enquanto no “sistema de referência” o investimento é decidido como resultado de expectativas otimistas, no “sistema real” o investimento é decidido como resultado da influência de novas invenções, e este investimento é parcialmente “poupador de trabalho” e parcialmente “intensivo em capital”³⁰.

Como consequência, no início do primeiro período ($t = 1$), ambos os sistemas têm características iguais, exceto pelo caráter das decisões de investir do período anterior. No final do primeiro período ($t = 1$) - o que equivale ao início do segundo período ($t = 2$) - ambos os sistemas têm o mesmo volume de “capital real”. Entretanto, a ocorrência de progresso técnico “intensivo em capital” no “sistema real” gera alterações em alguns valores relativos entre este e o “sistema de referência”, no qual não houve progresso técnico. Nas palavras de Kalecki:

“As a result of investment in period 1, any industry possesses the same real capital in both systems, but, because the inventions were capital-using, this capital represents a smaller capacity in the actual system than in the reference system. And because the inventions were labour-saving, this equipment requires less labour to produce the same output” (Kalecki, 1941, CWMK II: 112).

Isto merece alguns comentários: em primeiro lugar, embora Kalecki utilize o conceito de progresso técnico “poupador de trabalho” sem defini-lo, a citação acima parece oferecer uma definição: o progresso técnico é “poupador de trabalho” quando permite produzir o mesmo nível de produto com menor quantidade de emprego.

Em segundo lugar, Kalecki atribui a redução da capacidade produtiva Y^P ao progresso técnico “intensivo em capital”. Ou seja, o “sistema real” passa por um processo de inovação tecnológica “intensiva em capital” e termina com uma capacidade produtiva menor. Isto parece inconsistente. O problema reside, de um lado, na definição de progresso técnico “intensivo em capital” - que reduz Y^P/K - e de outro, nas hipóteses por demais restritivas adotadas por Kalecki - a de que o “capital real” não se altera. Kalecki oferece uma explicação que em nada ajuda para dirimir esta inconsistência:

técnico poupador de capital seria aquele que eleva K menos do que eleva Y^P ($\Delta K < \Delta Y^P$ com $\Delta K > 0$ e $\Delta Y^P > 0$).

³⁰ “There is the same volume of investment decisions in any industry of either system, but those in the actual system are partly of a labour-saving and capital-using type, which is not the case in the reference system” (Kalecki, 1941, CWMK II: 111). A redação de Kalecki indica que inovações “poupadoras de trabalho” não são a mesma coisa que inovações “intensivas em capital”, mas ele não explicita a diferença.

“[...] a plant representing the same capital in both systems in order to produce the same output will have to employ more labour, and to be utilized in a smaller degree, in the reference system than in the actual system” (Kalecki, 1941, CWMK II: 112).

Segundo esta explicação, o “sistema de referência” - que não passou pelo processo de inovação tecnológica - precisa utilizar mais trabalho para produzir o mesmo nível de produto que o “sistema real”. Isto indica que a ausência de progresso técnico reduz a produtividade no “sistema de referência”. O que novamente não é óbvio e parece inconsistente é que o “sistema de referência” tenha um menor grau de ocupação da capacidade se comparado ao “sistema real”. Novamente, o problema decorre das hipóteses adotadas: Se o “capital real” K é constante, se o produto Y é igual e se por definição o progresso técnico intensivo em capital reduz Y^P/K (no “sistema real”), isto equivale a uma elevação relativa de Y^P/K (no “sistema de referência”) - ou mais precisamente, numa elevação de Y^P que se reflete numa redução de Y/Y^P , isto é, do grau de utilização da capacidade produtiva no “sistema de referência”.

Em resumo: o progresso técnico intensivo em capital reduz Y^P/K no sistema em que ocorre e reduz Y/Y^P no sistema em que não ocorre. Mais à frente, Kalecki não apenas corrobora esta interpretação, como a radicaliza:

“The equipment, although representing in any industry the same amount of ‘real’ capital in both systems, is different in character [...] The difference consists only in the fact that in the reference system it represents a greater capacity, whose utilization, however, is smaller in inverse proportion” (Kalecki, 1941, CWMK II: 113).

Ou seja: o progresso técnico “intensivo em capital”, a rigor, tem como único efeito reduzir Y^P no sistema em que ocorre. Todo o resto é consequência.

A aparente inconsistência não pode ser eliminada por meio de modificações no valor real do capital K em qualquer um dos sistemas pois as demais características permanecem inalteradas ou em estrita equivalência: a mudança de produtividade no “sistema real” se reflete no “sistema de referência” em uma redução da taxa de salários proporcional à queda de custos (salariais) ocorrida no “sistema real”; portanto, os preços não são afetados e tampouco sofrem a influência da alteração do grau de utilização do equipamento pois, por hipótese, em ambos os sistemas a curva de custo marginal é horizontal no horizonte relevante de produção. Ou, como resume Kalecki, “the both systems are equal from the supply side” (Kalecki, 1941, CWMK II: 112). Além disso, a produção de bens de investimento é a mesma nos dois sistemas (pois em ambos as decisões de investir foram de mesmo montante, embora os motivos tenham sido outros e o caráter do investimento tenha sido diferente). Conseqüentemente, também os preços dos bens de capital em ambos os sistemas são os mesmos, e é isto que sustenta a hipótese de que o “capital real” em ambos é o mesmo.

Se não há variação de preços pelo lado da oferta, tampouco os preços variam pelo lado da demanda. Embora o volume de emprego no “sistema real” seja menor do que no “sistema de referência”, Kalecki ajusta esta diferença por meio da variação dos salários, conforme hipótese construtiva do modelo, justamente para manter, em ambos os sistemas, a mesma massa de salários. Se o produto em ambos é o mesmo, e a massa de salários em ambos é a mesma, segue-se que em ambos os sistemas o lucro também é o mesmo. Não há portanto pressão de demanda configurada em qualquer variação da distribuição da renda sobre os preços.

Tudo isso faz com que não haja motivos para alteração ou diferenciação nas decisões de investir nos dois sistemas. O volume das decisões de investimento não será afetado pela diferença de caráter do equipamento de capital existente em cada um dos sistemas, pois ambos representam o mesmo “capital real” e geram o mesmo montante de lucro. Isto significa que a base objetiva para o cálculo do lucro esperado - o incentivo ao investimento - é a mesma em ambos.

O mesmo raciocínio se repete para todos os outros períodos de curto prazo. A conclusão é a de que, a qualquer momento, ambos os sistemas têm o mesmo nível de produto Y , o mesmo volume de capital real K , o mesmo sistema de preços p e a mesma taxa de juros i . Em particular, ambos têm a mesma razão capital/produto K/Y ou, mais precisamente: $K/Y = K^*/Y^*$ (onde o asterisco indica o “sistema de referência”).

A igualdade da razão capital produto decorre do fato das inovações intensivas em capital no “sistema real” reduzirem a razão entre a capacidade produtiva e o capital “real” neste sistema em relação à mesma razão no “sistema de referência” e disto ser compensado por uma redução do grau de utilização no “sistema de referência” em relação ao do “sistema real”. Nas palavras de Kalecki: “the utilization of equipment in the reference system falls relative to that in the actual system proportionally to the fall in the ratio of capacity to capital in the actual as compared to the reference system” (Kalecki, 1941, CWMK II: 114)³¹.

O mesmo tipo de resultado ocorre com relação ao nível de emprego e de salários: “employment in the reference system is rising relative to that in the actual system proportionally to the rise in the productivity in the latter” (Kalecki, 1941, CWMK II: 114). E mais adiante: “money wage rates in the reference system fall relative to those in the actual system in inverse proportion to

³¹ O quadro abaixo sistematiza estas relações, que se repetem para todos os períodos, ou seja, para qualquer valor de t :

	$t = 0$	$t = 1$
capital real K	$K_0 = K^*_0$	$K_1 = K^*_1$
produto (renda) efetivo Y	$Y_0 = Y^*_0$	$Y_1 = Y^*_1$
capacidade produtiva Y^P	$Y^P_0 = Y^P^*_0$	$Y^P_1 < Y^P^*_1$
produto/capacidade produtiva Y/Y^P	$Y_0/Y^P_0 = Y^*_0/Y^P^*_0$	$Y_1/Y^P_1 > Y^*_1/Y^P^*_1$
capacidade produtiva/capital Y^P/K	$Y^P_0/K_0 = Y^P^*_0/K^*_0$	$Y^P_1/K_1 < Y^P^*_1/K^*_1$
produto/capital $(Y/Y^P) \times (Y^P/K) = Y/K$	$Y_0/K_0 = Y^*_0/K^*_0$	$Y_1/K_1 = Y^*_1/K^*_1$

the rise of productivity in the latter” (Kalecki, 1941, CWMK II: 114). Para completar, e como os preços em ambos os sistemas são iguais, a massa real de salários é a mesma em ambos³².

O teorema não descreve situações reais, mas serve para que Kalecki tire como conclusão fundamental a de que “the effect of technical progress is not to increase output but to save labour” (Kalecki, 1941, CWMK II: 114). O sentido desta conclusão é o de que “although technical progress does not promote by its ‘pure’ effect an increase in output, in certain cases it clears the ground for it by overcoming the scarcity of labour”(Kalecki, 1941, CWMK II: 115).

É evidente - e Kalecki o reconhece - que esta conclusão depende de modo crucial dos pressupostos adotados e das simplificações assumidas, tais como a desconsideração dos efeitos “colaterais” do progresso técnico sobre o grau de monopólio, ou a pressão que a produtividade crescente do trabalho exerce sobre o nível de preços ou ainda o estímulo que as invenções dão ao investimento. Kalecki também reconhece que estes efeitos “colaterais” não são, de forma alguma desprezíveis e chega a mencionar que não apenas estiveram presentes como foram responsáveis pelo “boom” secular que se seguiu à Revolução Industrial. Mas enfatiza que o progresso técnico só influencia o produto (ou a renda) de modo indireto: “the significance of our theorem is to show that technical progress influences output only through the channels of inventions stimulus, oligopoly, and the general price level (or by overcoming the scarcity of labour)” (Kalecki, 1941, CWMK II: 115). Como se verá, esta síntese do seu teorema é duramente criticada tanto por Keynes quanto por Kaldor.

A preocupação com o processo de crescimento da renda e particularmente com os fatores que podem restringi-lo é a chave para que se possa entender o tratamento de Kalecki à questão do progresso técnico - e isto não diz respeito apenas a este ensaio³³. Seu ponto de partida é a busca de uma explicação para a tendência à queda da razão produto/capital Y/K , que ele considera característico do sistema capitalista, mas não como decorrência do progresso técnico³⁴. Uma explicação possível pode residir na elevação do grau de monopólio, mas Kalecki não desenvolve o argumento. E, embora faça breves referências sobre a influência de alterações do grau de utilização

³² Pode-se formalizar esta conclusão como segue: considerando que W representa a taxa nominal de salários e que L representa o número de trabalhadores empregados, e usando o asterisco para denotar o “sistema de referência”, tem-se a igualdade $WL = W^*L^*$ que representa a mesma massa de salários em ambos os sistemas. O progresso técnico (“poupador de trabalho”) reduz o nível de emprego no “sistema real” ($L < L^*$), o que é contrabalançado por uma redução, na mesma proporção, do salário nominal no “sistema de referência” ($W > W^*$). Segundo sugestão de Kalecki, $L^* > L$ pode representar uma jornada de trabalho mais longa ou um nível de desemprego menor.

³³ Nem apenas com relação às economias capitalistas. Ver, por exemplo, Kalecki (1963).

³⁴ “If in the actual system the utilization of equipment is not increasing - and such seems to be the case in reality - there must occur a permanent fall in the ratio of output to capital. But this does not mean that the capital-using type of technical progress is responsible for this change. For the same fall of the ratio of output to capital occurs in the reference system, taking there the form of diminishing utilization of equipment. Thus there must exist some factors other than the ratio of capacity to capital which account for the fall of the ratio of output to capital both in the actual and in the reference system” (Kalecki, 1941, CWMK, II: 115).

da capacidade produtiva $\Delta(Y/Y^P)$, da razão entre capacidade produtiva e o capital real $\Delta(Y^P/K)$ e a razão produto/capital $\Delta(Y/K)$ sobre a taxa de crescimento $\Delta Y/Y$, tampouco avança esta linha de raciocínio neste ensaio³⁵. Estas questões seriam retomadas e desenvolvidas em inúmeros outros trabalhos do Autor.

A correspondência entre Joan Robinson e Keynes em torno deste ensaio de Kalecki é um testemunho do apreço de Joan Robinson por Kalecki, de um lado, e do despreço não disfarçado de Keynes, por outro. Pouco tempo depois de receber o artigo de Kalecki, Keynes escreveu para Joan Robinson, em 4 de fevereiro de 1941, tecendo duas críticas principais, uma relativa ao pressuposto de que mesmo no longo prazo as empresas operam com capacidade ociosa, e outra com relação à conclusão de que o progresso técnico causa uma redução do produto: “is it not rather odd when dealing with ‘long-run problems’ to start with the assumptions that all firms are always working below capacity?” (CWMK, II: 530) e em seguida: “or take his final conclusion that technical progress causes a reduction of output” (CWMK, II: 530).

Joan Robinson respondeu no mesmo dia, defendendo Kalecki das duas críticas, e alertando que estava “prepared to stick up for Kalecki” (CWMK, II: 531). Com relação ao tema da capacidade ociosa, segundo ela, Kalecki estava apenas usando “the usual bag of tricks of Imperfect Competition theory [...] to say that price normally exceeds marginal cost [...]” (CWMK, II: 531) e no que diz respeito ao segundo, ela argumentou que as inovações elevam o produto à medida que o capital se acumula, mas que se as inovações elevarem a participação do capital relativamente à participação do trabalho, o produto tende a cair pelo fato destas mudanças relativas gerarem um aumento da propensão a poupar. Deve-se observar que este era justamente o seu próprio argumento no ensaio de 1936.

O debate em torno dos pressupostos que compõem a concorrência imperfeita continuou por mais duas cartas: uma de Keynes, escrita em 12 de fevereiro de 1941, e outra de Joan Robinson, datada de 14 de fevereiro do mesmo ano. Keynes não aceitou a hipótese de excesso de capacidade num problema de longo prazo, e chegou a considerá-la um “esoteric abracadabra” (CWMK, II: 531), ao que Joan Robinson protestou argumentando que “under imperfect competition there is surplus capacity when in full equilibrium; under perfect competition any firm which is working at all must be working bang up to capacity even in a deep slump. This is certainly more and not less ridiculous” (CWMK, II: 532)³⁶.

³⁵ Cf. nota 29 acima. A rigor, Kalecki limita-se a afirmar que o grau de utilização da capacidade produtiva no “sistema de referência” só será constante se a taxa de crescimento da economia também for constante e que se a taxa de crescimento for decrescente, o grau de utilização da capacidade também o será.

³⁶ Sobre o aparente descaso de Keynes com relação à concorrência imperfeita, bem como sua aparente aceitação dos postulados da concorrência perfeita e o caráter paradoxal disto, já que tanto *The General Theory* quanto *The*

Em 24 de fevereiro Joan Robinson escreve novamente, anunciando que Kalecki aceitou as críticas dela e rescreveu o artigo³⁷. Ela explicita que as conclusões dele diferem das que ela alcançou no artigo “The long period theory of employment” (1936) “which you [Keynes] swallowed all right at the time” (CWMK, II: 533), apenas pelo fato de demonstrar que invenções intensivas em capital não reduzem a participação do trabalho na renda, já que também não elevam a participação do capital na renda. E termina: “I think that Kalecki is solving mysteries, not creating them” (CWMK II: 533). Para Richard Kahn, Joan Robinson escreve que não saberá o que fazer se Keynes não gostar da nova versão do artigo de Kalecki³⁸.

Em 04 de março Keynes se mostrou satisfeito com o resultado, aliás excessivamente satisfeito, a ponto de afirmar que o artigo não trazia qualquer novidade: “I cannot discover that the elaborate apparatus of the reference system leads to any conclusion which is not obvious from the start” (CWMK II: 533), especialmente com referência à conclusão de Kalecki, de que o progresso técnico só influencia o nível do produto por meio do seu impacto sobre o estímulo ao investimento, sobre o oligopólio, e o nível geral de preços, além de possibilitar a superação de problemas de escassez de mão de obra. Keynes termina a carta perguntando “does the article tell you anything you did not before?” (CWMK II: 533) e anuncia que enviará uma cópia do artigo para Kaldor, para obter uma segunda opinião. A cópia é enviada a Kaldor no mesmo dia, acompanhada de uma carta na qual Keynes resume suas críticas anteriores.

Cinco dias depois, em 9 de março, a resposta de Kaldor concorda com as críticas de Keynes, adicionando ainda outras: em primeiro lugar, segundo Kaldor, o ensaio de Kalecki traz uma única proposição que além de não estar explicitada, já estava implícita tanto na *General Theory* de Keynes quanto no “The long period of employment” de Joan Robinson. Trata-se, de acordo com Kaldor, da concepção de que considerando-se dados os fatores que determinam o nível de emprego (a propensão a consumir, a eficiência marginal do capital e a taxa de juros), o progresso técnico, no longo prazo, reduz o nível de emprego e não eleva a renda. (Kaldor raciocina em termos da razão produto *per capita*, de modo que se o produto cresce mas o nível de emprego não, a razão emprego/produto cai.) A segunda crítica de Kaldor dirige-se ao pressuposto de manter constante as variáveis independentes - especialmente a eficiência marginal do capital e a taxa de juros - o que considera improvável, particularmente no longo prazo com ocorrência de progresso técnico. Por último, Kaldor acha falta de uma prova mais acabada do pressuposto de que o progresso técnico

Economics of Imperfect Competition foram escritos no mesmo lugar, na mesma época e por pessoas que tomaram parte ativa do mesmo movimento intelectual, veja Heller (1996), especialmente o primeiro capítulo. Para uma interpretação de que *The Economics of Imperfect Competition* enfatizou as imperfeições do mercado de trabalho ver Heller (1998a).

³⁷ A versão deve ter desaparecido, pois não há outra menção nos CWMK a este respeito.

³⁸ Carta de Joan Robinson para Richard Kahn, 25.02.1941, RFK/13/90/4

modifica o grau de monopólio, contrabalançando os efeitos sobre a propensão a consumir. Quanto ao método usado por Kalecki, Kaldor o considera “cumbrous and lengthy” (CWMK, II: 534).

Neste interim - em 6 de março - Joan Robinson envia nova carta para Keynes, na qual pergunta provocativamente: “Surely if anyone asked you ‘Do capital using inventions increase capital per unit of output?’ you would have said ‘Of course - what a dotty question?’” (CWMK, II: 534). Segundo Joan Robinson, o que Keynes não consegue entender, é que Kalecki trata da interação entre o grau de utilização do equipamento de capital e mudanças na técnica, simultaneamente, e que isto constitui um avanço na medida que permite avaliar os efeitos mais gerais do progresso técnico sem cair na armadilha de considerar, também, seu impacto sobre a propensão a consumir - como, aliás, ela havia feito no “The long period theory of employment”. Neste sentido, acusava Keynes de ser ingrato: “I think you are looking a gift horse in the mouth - after all even one valid proposition, extending *The General Theory* [...] is something to be thankful for” (CWMK, II: 534).

Para Joan Robinson, em carta de 12 de março, Keynes finalmente explicita de forma clara sua discordância de Kalecki. Para Keynes, há um problema conceitual nas razões Y/Y^P e Y^P/K propostas por Kalecki³⁹. Segundo Keynes, o máximo que Kalecki consegue demonstrar é que o progresso técnico intensivo em capital pode fazer com que o grau de utilização da capacidade produtiva Y/Y^P caia. Neste sentido, a resposta à pergunta provocativa de Joan Robinson depende do que ela considera como produto (ou seja, se a razão a que ela se refere é K/Y ou K/Y^P): “If you had asked me - ‘do capital-using inventions increase capital per unit of output?’ of course I should have said ‘yes’, since I should have interpreted this to mean per unit of capacity output” (CWMK, II: 535). Keynes não encontra qualquer explicação válida para a concepção de que no mundo real Y/Y^P caia mais rapidamente do que Y^P/K se eleva, de modo a comprovar que o progresso técnico intensivo em capital reduz a razão capital/produto K/Y : “If you assert as a dogma that in the actual world the effect of capital-using inventions is always to reduce u more than it increases c, I should probably have replied - ‘What a dotty idea!’” (CWMK, II: 535). Ele anexa a esta carta os comentários que havia recebido de Kaldor, concluindo que considera o artigo de Kalecki “pretentious, misleading, inconclusive and perhaps wrong” (CWMK, II: 535)⁴⁰.

A Kaldor, em carta de 18 de março, Keynes informa que seus comentários foram encaminhados para Kalecki através de Joan Robinson, com novas críticas, já que, mesmo que Kalecki fosse capaz de provar que as inovações intensivas em capital aumentam a diferença entre o produto efetivo e o produto potencial, ainda teria que comprovar que esta tendência é mais forte que a tendência contrária. Sobre o papel de Joan Robinson nesta controvérsia, Keynes escreve que ela foi

³⁹ Esta notação é nossa, não de Keynes.

capaz de ver algo que nem ele nem Kaldor foram, e que não duvida que “in the end she will write quite a good article for him!” (CWMK, II: 536)⁴¹.

Não há registro das outras versões do artigo de Kalecki. Ele acabou não sendo aprovado no *The Economic Journal*, mas foi publicado pela *Review of Economic Studies*, em junho do mesmo ano.

Conclusão

O leitor poderá questionar as razões pelas quais não se explorou com mais profundidade as diferentes versões dos ensaios analisados. A resposta é a que segue: o texto não procura avaliar a evolução do pensamento de cada autor individualmente, mas sim destacar os elementos de convergência (e divergência) de suas abordagens sobre o progresso técnico, sugerindo que as diferenças não são tão grandes a ponto de impedir que sejam reunidas e tratadas num conjunto coerente de proposições teóricas.

Trata-se, evidentemente, de uma primeira aproximação, e o termo “aproximação” é importante. A obra dos autores é vasta, e os temas por eles tratados são inúmeros, de modo que uma interpretação baseada quase que exclusivamente em apenas um trabalho de cada um não pode se arvorar como definitiva. Mas isso não impede o avanço de alguns passos na direção proposta.

Joan Robinson enfatizou os efeitos diretos das inovações sobre a distribuição da renda e, através dela, sobre o nível de emprego. Como foi visto, este raciocínio tinha por base o conceito de propensão a consumir (mais alto para classes de menor renda e vice-versa) e era importante por afetar a demanda efetiva. Kalecki, por sua vez, considerou apenas as decisões de investimento, e explicitamente adotou como hipótese construtiva do seu teorema não apenas que os trabalhadores não poupam (gastam o que ganham), mas também a de que os efeitos do progresso técnico sobre o grau de monopólio, o nível geral de preços e o próprio incentivo a investir são colaterais. Ambos concluem que o progresso técnico “intensivo em capital” reduz o nível de emprego⁴².

A característica da abordagem de Joan Robinson é a tentativa de tratar todos os efeitos

⁴⁰ Ou pior: “I would rather have cheese to a weight equal to the paper it would occupy in 5,000 copies of the [*Economic*] *Journal*!” (CWMK, II: 535).

⁴¹ Sobre outras disputas entre Keynes e Kalecki, intermediadas por Joan Robinson, veja-se por exemplo (Robinson, 1977).

⁴² A rigor, deve-se ressaltar que Joan Robinson utiliza o termo “poupador de trabalho” e não “intensivo em capital”. Esta distinção não é importante no contexto desta comparação e por isso as expressões estão sendo usadas como sinônimas, mas é fundamental para a evolução do pensamento da Autora sobre o tema, conforme se discute em Heller (1998b). Kalecki parece distinguir inovações “poupadoras de trabalho” de “intensivas em capital”, mas não define a

simultaneamente. Kalecki, ao contrário, procura isolar os efeitos cruciais. Ambos foram obrigados a adotar hipóteses simplificadoras, e Kalecki chega a anotar que inspirou-se em Joan Robinson para fazê-lo. O fato de Joan Robinson adotar a hipótese de concorrência perfeita enquanto Kalecki adota a de concorrência imperfeita não configura uma diferença fundamental entre seus respectivos trabalhos - o que parece estar de acordo com Kaldor (que não comenta o assunto) e a despeito da opinião de Keynes.

Mas existe uma (aparente) diferença importante entre os dois ensaios. A conclusão de Kalecki, de que o progresso técnico não altera a renda - “the effect of technical progress is not to increase output but to save labour” (Kalecki, 1941, CWMK II: 114) - completada pela afirmação de que sua função é superar os problemas de escassez de mão de obra - “although technical progress does not promote by its ‘pure’ effect an increase in output, in certain cases it clears the ground for it by overcoming the scarcity of labour” (Kalecki, 1941, CWMK II: 115) - decorre de uma preocupação que em certo sentido é inversa à de Joan Robinson: enquanto ela procura discutir a possibilidade do progresso técnico se configurar num freio ao processo de acumulação por sua tendência a “desempregar”, Kalecki procura mostrar como esta mesma característica do progresso técnico serve de motor da acumulação⁴³. Mas isto só é possível justamente porque ambos autores vêem no progresso técnico uma tendência a reduzir o nível de emprego.

Como se viu, para Joan Robinson, um fluxo constante de inovações “desde que não excessivamente poupadoras de trabalho” é o que garante que a taxa de investimento não caia a zero. Os argumentos de Kalecki não são essencialmente diferentes: embora considere que o progresso técnico gera desemprego, também defende a concepção de que um dos importantes estímulos ao investimento decorre das inovações. Como bem observa Sawyer (1985: 290): “bringing the two elements together would suggest that technical progress is seen to have two offsetting properties of lowering unemployment (through enhancing aggregate demand) and of increasing unemployment (through being labour-replacing)”.

Joan Robinson destaca o papel das alterações na distribuição da renda, enquanto Kalecki faz referência às mudanças no grau de monopólio. Joan Robinson menciona a propensão a consumir, e Kalecki se refere ao grau de utilização da capacidade produtiva, que depende da demanda efetiva.

diferença. Assim como Joan Robinson, em outros trabalhos Kalecki usa termos diferentes. A este respeito ver por exemplo Feiwel (1975), especialmente os capítulos 13, 14 e 15 e Sawyer (1985), especialmente capítulo 11.

⁴³ Apenas para exemplificar: em seus comentários a uma primeira versão do livro *The Rate of Interest and Other Essays* (Robinson, 1952), Kalecki sugere que a mera ausência de inovações pode ser um freio ao crescimento, o que dispensaria as considerações em torno das “vicissitudes” da economia capitalista que Joan Robinson desenvolve naquele livro: “The second general point concerns your tacit assumption that the capitalist system has an inherent tendency for development at a constant rate and that only the ‘vicissitudes’ which you analyse [...] disturb such a development. Now, I can imagine very well a system which would not develop but would be stationary or even shrink

Esta convergência sem dúvida foi o motivo pelo qual Joan Robinson tanto se empenhou em defender Kalecki das críticas de Keynes. Mas, apesar de apreciar a conclusão de Kalecki de que o progresso técnico intensivo em capital não altera a participação do trabalho na renda, a ponto de mencioná-la na sua defesa junto a Keynes, ela mesma nunca abandonou a tentativa de relacionar as inovações à distribuição da renda. Talvez isto se explique pelo fato dela ter sido uma participante ativa da “revolução keynesiana”, dedicando-se a explicar, defender, divulgar e ampliar, para além da análise do curto prazo, o escopo da teoria keynesiana, cujo núcleo central dizia respeito ao problema do desemprego.

Kalecki escreveu vários artigos sobre distribuição de renda, mas raramente relacionou-a diretamente ao progresso técnico. Em geral, considerava que o progresso técnico afeta a distribuição da renda mediante seus efeitos sobre o grau de monopólio, enquanto Joan Robinson tentava construir uma relação direta, através da “substituição de fatores”. A abordagem Kaleckiana da economia capitalista, quase que desde o início, foi dirigida a problemas de longo prazo, isto é, do crescimento e do ciclo econômico. Nas palavras dos editores dos *Collected Works of Michal Kalecki*:

“The starting-point of [Kalecki’s] investigations was the cyclical character of capitalist reproduction, which, he believed, in the absence of technical progress or increasing government action, would be incapable even of overcoming a crisis, let alone a sustained expanded reproduction” (CWMK, I: 2).

Estes temas são tão complexos que exigiam pressupostos simplificadores, tais como a estabilidade da distribuição da renda. Em outros trabalhos Kalecki examinou a possibilidade de alterações na taxa de crescimento como decorrência de mudanças no grau de utilização da capacidade produtiva instalada (ou do uso extensivo da mão de obra disponível), separando os efeitos de “substituição de fatores” dos do “progresso técnico propriamente dito”, e procurou mostrar que toda inovação eleva a razão capital/trabalho mas não necessariamente a razão capital/produto, pois isto depende do tipo de progresso técnico em questão. Para este tipo de análise, construiu uma “curva de produção” que em muitos aspectos é semelhante à “pseudo-função de produção” de Joan Robinson, que por sua vez foi elaborada para diferenciar variações absolutas de variações relativas nestas e em outras razões (“ratios”), igualmente diferenciadas segundo o caráter da inovação considerada.

Desenvolver este tema - que constitui o segundo marco mencionado na introdução a este texto - envolveria ainda uma discussão da função de produção neoclássica, além de uma comparação com a contribuição de Harrod à mesma problemática. Isto seria, entretanto, demasiado a esta altura.

without any such ‘vicissitudes’ but generally as a result of, say, absence of innovations.” (CWMK, II: 539). Há

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Tadeusz Kowalik

first draft, only quotations are for quotation

Kaleckian crucial reform of capitalism and after (enlarged theses)

My short note contains more texts exegesis than theorizing, it belongs more to the *history* of economic thought than to economic *theory*. By now I am teaching comparative economic systems, and from this point of view I would like to reconsider Kalecki's most general views on this century capitalism as socio-economic system. Or as I call it – on a capitalist mega-system, which is, even now in the era of globalization, split into many different systems.

Kalecki's message

This note is mainly caused by many misunderstandings which were created by the last, posthumously published, Kalecki's article¹ *Observations of crucial reform of capitalism* [Kalecki /1971/ 1991]. The controversial character of this article was stressed by the unusual way, it was published. Sent to the Italian political monthly review "Critica Marxista", it was published with more than a year's delay, and not in a journal it was sent, but in the rather more peripheral bimonthly review "Politica et Economia". Moreover, it was supplemented with a long and far going criticism (practically a rebutal of Kalecki's main idea) written by the well known Italian Marxist economists, Antonio Pesenti.

¹ I co-authored this article. My role was limited, however, to the historical part of the essay (I wrote about an old controversy between Bernstein, Hilferding and Rosa Luxemburg). An article rose from our several discussions mainly about the needs of crucial reform of „really existing socialism”. Kalecki's idea was to show first that even capitalism has undergone the necessary reforms, and then he would have come to the most important task: outlining of „crucial reform” of socialism. He repeated several times that during the

The main message of Kalecki's article is clear even in the title: *crucial reform of capitalist system* has been quite successfully implemented in the main capitalist countries. Kalecki saw this as paradoxical outcome of the class struggle. I quote the main theses:

"Let us imagine that the strong pressure of the masses leads to such a radical reform of the system, in spite of the opposition of the ruling class, that, without abolishing existing relations of production, a new valve is opened for the development of forces of production. There will then be a paradoxical situation: a 'crucial reform' imposed on the ruling class may stabilize the system, temporarily at least. As argue below, we have to do with such a situation in contemporary capitalism" [Kalecki et al., 1991:467]. And further we read: "Government intervention in the expansion of market became an institution, making it possible to limit unemployment to a few per cent, and hence in practice to accept something similar to the right to work" slogan (...) This state of affairs (along with a considerable expansion of social security) led to a certain transformation of the working class, which on the whole became radically reformist in its attitude toward capitalism" [Ibid.:472].

This "neo-capitalism", or reformed capitalism, as Kalecki labelled it, shaped by strong pressure of the masses, was also the result of the favourable international environment, namely of the emergence of the socialist camp, and rivalry between the two camps, each having its own superpower.

For Pesenti the very idea of even temporal stabilisation of capitalist system was unacceptable. I meant for him an underestimation of its "*internal contradiction, especially economic ones*" [Ibidem, 612]

debate of the Fifties he has underestimated the role of market, employees participation and decentralization. Unfortunately, he died a couple of months later.

From political business cycle to the long upturn

Pesenti's contention was perhaps too dogmatic, but similar opinions also repeated by many Kalecki's followers. They were at least surprised by the Kalecki's stability thesis. Why? The simplest explanation is, because Kalecki was for long well known, as a theoretician very sceptical with regard to the capitalist developmental possibilities and about the reformability of capitalism. In many publications he was (still is) labelled as a stagnationist, or in one of the newest criticisms as a painter of "bleak picture". I myself remember that when Kalecki was sending to "The Economic Journal" his last purely theoretical article on *Trend and Business cycles reconsidered (1968)*, he told me something like this: "*my criticism of capitalism goes even further than that of Karl Marks. Marx took an expansion of capitalism for granted, whereas I think, you have to explain this by some exogenous factors*".

In a different wording, this Kalecki's pessimistic attitude has also been expressed by Joan Robinson. Evaluating the Kalecki's contribution to the theory of effective demand, she stressed, that Kalecki, strong in his analysis of business cycle (short-run), was not that sure of himself in his views of a long-run processes. Partly because he was lacking a definite theory of investment decisions. She wrote: "*I had a running argument with Michał on this subject. He regarded my use of the concept of 'animal spirit' as somehow irrational though to me it was only a modification of the Marxian imperative: 'Accumulate! Accumulate! That is Moses and the Prophets)*" [Robinson, 1977:X]. *He /Kalecki/ maintained that new inventions raise prospects of profit and accumulate investment*" [Robinson, 1977: 17].

These two tendencies in explaining capitalist dynamics last till these days. Sometimes, even those who outline very gloomy prospects for capitalism tend to explain it by an animal drive for over-accumulation and over-investment. This is the main idea of a recently published book, much discussed in the West, *The economics of global turbulence* by Robert Brenner [1998].

Although it is not my purpose here to consider the controversy between J. Robinson and Kalecki, I am tempted to think that such an “animal spirit” might have been a historical phenomenon, quite adequate to the heroic period of capitalism, dominated by individual entrepreneurs. Contrary to this, mature capitalism of great corporations needs some special (or stronger) incentives for accumulation. A sharp division between economic performance of the first quarter of century after the World War II, and the second quarter lies just in this. These special incentives have been created by the state intervention. I will come back to this with regard to the present criticism of Kalecki’s theory, but leaving aside Joan Robinson’s views.

But, let’s try to answer the question why Kalecki decided to invent the new concept, not referring to his older notion, like “regime of political business cycle” or “capitalism of full employment”. These are notions used in his famous, hundreds of time quoted essay *Political aspects of full employment* [1943/1991]. This is simultaneously an attempt to reconcile Kalecki’s general pessimism with his optimistic concept of crucial reform of capitalist economy. In 1943 Kalecki distinguished (besides fully fledged, wild capitalism) two stages of reformed capitalism. The “*regime of the political business cycle*” was to mean a policy, which in England in the Sixties got the name “stop and go” policy”, because a continuous full employment policy would undermine the power of the business leaders in controlling the workers. The higher stage of reforms would mean “*full employment capitalism*”. For this one to become a reality, - I quote Kalecki’s world - “*a fundamental reform will have been incorporated in it*”. The reform which would develop the new social and political institutions reflecting a substantial participation of working class². At that time (1943) Kalecki has thought that without such a fundamental reform, capitalism would be scrapped as an outmoded system. Fascism

² The closest historical example of the full employment capitalism would be the Scandinavian system, existed at least till the beginning of the Nineties.

or socialism was to be the alternative outcome. *“The fight of the progressive forces for full employment – was for Kalecki – a way of preventing the recurrence of fascism”*.

And now, let's come to the situation in the Western World of the Sixties. Kalecki several times wrote about the radically changed situation, particularly, that capitalism evidently did not face a danger of being scrapped as outmoded system. He not only did not expect socialist revolution, but even “full employment capitalism”, as defined in 1943 essay, was behind a horizon. He could not repeat the statement that *“What the masses now ask for is not the mitigation of slumps but their total abolition”*. This perspective belonged either to the remote past or the distant future. If there was a change of views then, it was the result of a change of situation. Once again, using his own words: the masses seemed to demand not the abolition of a system, but the mitigation of slumps. This is crucial assumption of his new article.

In the 1943 article he has assumed that Government intervention would be in this regime of political business cycle tied down to public investment not embracing subsidies of consumption. He postulated, clearly as a part of “full employment capitalism”, subsidising family allowances old age pensions, reduction in indirect taxation, subsidising prices of necessities. At the end of an exceptional decade of the Sixties Kalecki could have thought that these postulates have been, under strong pressure of the masses, more or less fulfilled. In this sense capitalist reforms went further than to a simple “a stop and go” policy. Even the consequences of “a stop and go” policy means that cycles became milder simply because the anti-recession policy leads to strenghtening of the so called automatic stabilizers. For example, Kennedy and Johnson are prized for reducing poverty almost by half. That means that part of budget expenditures became inflexible, less prone to fluctuations. By the way, let's remind a controversy between Kennedy and the Council of Economic Advisers,

which shows just this, that Kennedy's team went further than, let say a conventional "stop and go" policy.

The Kennedy and Johnson presidential years belonged to the triumphant economists as the true creators of economic policy, or perhaps more than that, creators of the threshold of the new economic system³. Walter Heller, the then chairman of the Council reports about a Kennedy meeting with the Economic Club of New York (the business community). After his speech on cutting taxes Kennedy said to Heller: "I gave them stright Keynes and Heller and they (the business community) loved it" [Heller, 1966:35].

What was new in their policy? The novelty was, that Kennedy came to the parliament and the business community with the proposals of cutting taxes not during the recession but when recovery was already on. And this happened after a long battle of Heller and other advisers for such an economic policy which is fighting recessions, but also which promote growth. It was the time of the second conflict over Berlin. Initially Kennedy proposed a tax increase of 3 billion USD to finance Berlin defence. Moreover, he wanted to balance the state budget already in the fiscal year 1963. In opposition to this, the economic advisers were arguing for the continuation of tax cut policy, and have finally won. Kennedy launched in early 1963 a massive tax cut and the economy started to boom. In Heller words it was to be "*a new era in American economic policy*". I have a feeling that there was no such new era in fatherland of keynesianism, Great Britain. One example: in 1965 I visited England fetched with several introducing letters of Oskar Lange to several leaders of the then ruling Labour Party. I went there with the naive belief that the Labour Party was the embodiment of the full employment policy. I said something like that to Thomas Ballogh, one of the close advisers to prime minister Harold Wilson, and he furiously disillusioned me. It seems that there the Keynesian recipe was no more than half-

heartedly implemented. Thus, there was no such time in England as an era of the economists deciding on directions of economic policy. That is why Kalecki addressed his new concept to The United States and Germany, not mentioning Britain.

Of course, looking back at the development of world economy during the last quarter of the century, one may say that in 1969-70 Kalecki happened to be too optimistic. After all, the concept of “crucial reform” was, in his intention, to be not only a summary of what has already happened, but also some prognosis. True, Kalecki admitted at the end of his consideration some signs of the future destabilisation, but they were very weak. He wrote: *“The relative stability of reformed capitalism depend on a high degree of social conformity. One can express the cautious opinion that recent student movements seem to be an omen of the declining ability of the bourgeois power apparatus to manipulate new generations entering the historical scene. This phenomenon is all the more serious since, with the rapid progress in science and technology, intellectuals are beginning to play an ever greater role as a social group”* [Kalecki, 1991:476]

Needless to say, that further development did not confirm this cautious prognosis. After all, the year of publishing this article (1971) was in a sense the caesura year of ending an era of Bretton Woods Accords and of the two decades of a remarkably successful Keynesian policy of welfare state, an epoch often termed as The Golden Age of capitalism. This regime of crucially reformed capitalism became, since the beginning of the 1970s, obsolete. Moreover, obsolete was also any idea of socialist revolution as well. In the light of social and economic development during the last quarter of the century, a criticism of Pesenti sounds as totally belonging to the remote past. One or two sentences of him will suffice: *“Let us take the class struggle, for instance. At least in Italy the Communist party (...) has been able to set the goals of the struggle for a socialist transformation of society”*.

³ Before that only the Swedish economists have already in the Thirties experienced their age of this type.

The long downturn

The second question I wanted to put is whether the Kalecki's concept of the regime of political business cycle and the concept of crucial reform may be helpful in explaining the next quarter of century's world economy, which has been termed by Robert Brenner [1998] as "the long downturn" and the present time what he labelled called "global turbulence".

I think that we do not find in Kalecki's writings an answer for the crisis caused by the world financial market turbulence. In this respect Keynes contribution (particularly his idea of "casino capitalism") is much more stimulating than that of Kalecki's.

But the Kaleckian explanation of the long downturn seems to be very simple and fully symmetrical to the explanation of the long upturn: Kalecki would most probably say, that the essence of "crucial reform" was successful governance of global demand. And the withdrawal of this type of state intervention or radical recution of it, must have caused a return of a strong business cyclicality and hence a decline of the rate of economic growth. I would like to mention some evidences that political rulers have acted in this direction and have desired to pay the recession price for reducing inflation and disciplining workers.

First, the empirical research of Sharon J. Erenburg [1984] and of David A. Aschauer [1997a, 1997b, 1997c] of dependence of general economic performance in the United States on investment in public capital (material and human infrastructure). They have, I think, convincingly, shown that, started already in late Sixties, a relative decline of government's investment in public capital went down *pari passu* with and have caused a decline of rate of growth of GDP and employment

This was about action, and now about non-action. There is strong evidence that the OECD members were longing for a recession. The Swedish economist Gosta Rehn, who has spent several years at its office as an expert, and still preserved his criticism to this organization noticed it is quite probable that *“the sudden increase in unemployment after that first oil price jump in 1973 was not planned by governments. But when it occurred, they were pleased to see that unemployment was not as dangerous politically as many had thought”* [Rehn, 1987]. Indeed, if we assume that the officials of this organization have expressed the opinion of at least the majority of member governments, they did not leave any doubt about their priority given to price stability over employment and growth and hence a desirability of recession. Here are some remarkable quotations.

In 1970 in the Report by the Secretary General of OECD we read (quotation): *“the problem of inflation arises in part from the very success of post-war economic policies in other directions – notably in achieving high levels of employment”*. By now, however, there is an *“urgent need to give priority to price stability”*. The author of the Report was fully conscious *“Giving higher priority to price stability means giving lower priority to something else /and that/ in a number of countries this may temporarily have to be /growth and employment/”*. The recommendation was very clear: *“excess demand should be eliminated and governments should be prepared, where necessary, to accept a temporary reduction in the rate of activity until there are signs that better price stability has been achieved”*[OECD, 1970:8-10][quoted after Korpi [1991:335].

There was however a big problem how to overcome the mentality of societies shaped by “crucially reformed capitalism”. The report continues: *“Today a serious recession would be clearly recognized to be the result of a deliberate policy being followed by the government’/while in the 1930s/ it could be thought that this was the*

result of a natural disaster. /Therefore/, the fundamental problem is how to get people to exercise the moderation that they would do if they believed that a major recession was possible, without actually having to administer the lesson” [Ibid.:35]. Seven years later, after the OPEC crisis, OECD has recommended to the governments a passive policy towards unemployment in these words: “A less rapid reduction of unemployment now, in order to achieve lower level of unemployment later on” [OECD, 1977:26].

Conclusions

In a summary I come back to comparative economic systems approach. Contrary to a widely held conviction, that Kalecki limited his interest to a general theory of capitalism, and in the later time also to a theory of “really existing socialism”, we find in his writings a variety of capitalist economies. We find: a fully fledged capitalism, the regime of political business cycle, capitalism of full employment, and finally capitalism crucially reformed, or neo-capitalism. In his other works, here not mentioned, we find intermediate systems, and mixed economies. We could also trace a variety of socialist economies, or “socialisms” (centrally planned, planned and self-managed, crucially reformed, etc.) as well, but this is beyond my present interest. What is important, that the key to his classification are in all these cases largely understood socio-economic policies, the role of the state and the scope of participation of main social classes. One could write a textbook of comparative economic systems based of Kaleckian terminology. In his seminal work *The great transformation* Karl Polanyi [1944/1962: 76] presented the concept of double movement. In his words it means: marketization and privatization of the economy is socially destructive. Society, social movements and the state must counteract against these destructive tendencies in order to self-defend. One could say,

that Michał Kalecki has made a step further, distinguishing different economic systems according to a degree of the society's self-defence⁴.

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⁴ "Social history in the nineteenth century was thus the result of a double movement: the extension of the market organization in respect to genuine commodities was accompanied by its restriction in respect to

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Three Ways to . . . High Unemployment

Paper to be presented at the International Conference to commemorate the 100th Anniversary of the birth of Michal Kalecki in Warsaw, 27-28 September 1999 and in São Paulo, 4-5 October 1999

I. Introduction

As a matter of definition, 'private savings' SP (properly defined) equal 'offsets to savings' OSP (Burchardt, p. 20) such as private investment (gross private capital formation) denoted IP, deficit spending (general Government expenditure G minus current revenues, including social security payments, T) denoted D and export surplus (exports of goods and services X minus corresponding imports M) denoted E. A major economic problem is the question what determines what: do 'offsets to savings' determine private savings or *vice versa*? This very question seemed to be definitely resolved at the time when *Economics of Full Employment* was published and many years thereafter giving priority to OSP and to private investment IP, by far the most important component of it. But since the oil crises and the surge of inflation in the 1970s, a new paradigm in economic theory has prevailed. This new paradigm has not been quite new. Mainstream economics has returned gradually to the old laissez-faire competition theory which the theory of effective demand had seemed to substitute for good. According to the new-old theory, there are savings SP which do determine offsetting expenditures $IP + D + E$. As far as unemployment is concerned, the new-old theory has returned to the view that it is mainly caused by real wages being too high and by lacking flexibility of labour force. The policy conclusions derived from the new-old paradigm were contrary to those which the theory of effective demand recommended as, for instance, in the famous paper of Michal Kalecki, 'Three ways to full employment'. These very conclusions have been, according to the present writer, mostly responsible for the high unemployment in Germany and the EU in the last quarter of the century and especially in the 1990s.

* Research associate, The Vienna Institute for International Economic Studies (WIIW). This paper could not have been written without the help of Mag. Roman Römisch, who was the best research assistant I have ever worked with. It is my duty and pleasure to express in this way my gratitude to him. All data used in this paper have been taken from OECD National Accounts and Main Economic Indicators available in the WIFO Database.

In Part I of the paper we sketch the theoretical background on which Kalecki's 'Three ways to full employment' was based. The role of investment as the driving force of a capitalist economy is stressed. Special attention is devoted to those factors which determine the degree of utilization of capacity and of labour force. This part of the paper has been written for those readers who are not closely familiar with Kalecki's theory. Part II of the paper is devoted to an empirical investigation. The author tries to imagine how Kalecki would investigate the reasons for high unemployment and follows this imaginary approach. Germany's record is divided into two periods: one lasting until 1979, with practically full employment, and one after 1979, with practically increasing unemployment. Because of the unification of Germany, most attention is devoted to the preceding time span, 1960-90. Whenever possible we analyse the period 1991-96 as well. In order to make some comparisons with outside developments we use also data from the USA.

II. Growth, utilization of capacity and unemployment

1. In developed economies – as opposed to the underdeveloped ones – the existing capital stock K offers enough jobs for the available labour force. If we denote the technical capital/output ratio by v , then potential GDP is $Y^* = (K/v)$. Y^* means aggregate output at full utilization of capacity where full utilization implies also the necessary flexibility of output with respect to demand and its structure. We assume further that potential output Y^* implies full employment in the sense that at this output level there exists no other than frictional unemployment, being a small fraction of total labour force.

Actual output $Y \leq Y^*$ depends on aggregate demand and is smaller than potential output if aggregate demand is too low. In this case capacity is not fully utilized, and the lower the degree of capacity utilization, the higher the unemployment. Both the capacity and the degree of its utilization depend first of all on investment, therefore we now turn our attention to this topic.

2. Kalecki introduced the very important distinction between investment decision ID and investment realized I . As there exists a time lag between these two, we have $I(t) = ID(t - 1)$, where the time lag has been chosen as a time unit. The distinction between ID and I does not apply to an increase (or decrease) in inventories above (or below) the desired level due to unexpected difficulties in finding markets (or an unexpected expansion of markets) as this kind of investment does not last for a longer period of time and therefore can be ignored. On the other hand, some investment decision may be revoked but this would not occur very often. Kalecki assumed also that investment decisions are made in real terms (a building, a factory, a piece of equipment etc.).

Assume now a closed economy without a Government. In such an economy we have *ex definitione* $S(t) = I(t)$ because we get saving and investment by deducing simply from

GDP consumption. It can be shown that the thesis that saving of period t , denoted $S(t)$, determines investment decision in the same period, denoted $ID(t)$ and hence investment in period $t + 1$, denoted $I(t + 1)$, leads to a serious logical difficulty. Indeed, if

$$S(t) = I(t)$$

$$ID(t) = S(t)$$

$$I(t + 1) = ID(t)$$

and

$$S(t + 1) = I(t + 1)$$

Then we come to the strange conclusion that

$$I(t + 1) = I(t)$$

i.e. that investment is constant over time. Because investment over time is not constant, the assumption that saving of a given period determines investment decision of the same period (and consequently investment of the next period) should be dismissed. On the other hand, the assumption that investment of the given period determines saving of the same period does not lead to any logical difficulty. Investment creates its own saving but saving cannot materialize if it is not caused by investment.

This can be explained in the following way. Imagine an economy consisting exclusively of a vertically integrated consumer goods sector. If all incomes in this economy (equal to the value of produced consumer goods) are spent, all output can be sold. If, however, part of income is not spent, a corresponding surplus of consumer goods comes into existence but according to our assumptions cannot be sold because the consumer goods sector is the only one in the economy. Now, assume that a vertically integrated investment goods sector exists together with the consumer goods sector. If this sector produces some investment goods, private households related to this sector get incomes and spend part of them on consumer goods. These expenditures create the very market for the surplus of the consumer goods sector and make saving in this sector (and in the whole economy) at all possible. This is how investment creates its 'own saving' while saving is not able to cause its 'own investment'.

3. The thesis that saving of a given period cannot determine investment of the same period does not mean that saving does not matter when investment is analysed. It matters very much. This applies especially to that part of saving that is appropriated by firms. Savings of firms increase their own capital, hence they positively influence their investment decision by providing finance. Indirectly they play the same role by facilitating access to the capital market and by allowing firms to expose themselves to the increasing risk always related with new investment decisions. Firms can and do invest more than they have saved, when they decrease their liquidity and take credits from the banking sector, or less,

when they decide to increase their liquidity and pay back their credits to the banking sector. As, however, investment increases over time, the business sector invests more than it saves while the private household sector saves more than it invests (in residential building).

4. Investment I increases the capital stock by ΔK and potential output Y^* , given v , increases by $\Delta Y^* = (1/v)I$. This is not exact as gross investment I partly replaces only worn-out elements of the capital stock. For the sake of brevity we disregard here this factor and assume e.g. that capital can last for ever. The capacity effect of investment ΔY^* is not a hard disputed topic because all economic schools accept it. What is hotly disputed is the 'income effect' of investment which is directly linked with the thesis that it is investment which determines saving and not the other way. This thesis has far-reaching theoretical and practical consequences. Indeed, it is well known that investment decisions are volatile and unstable by their very nature. They refer to future events with respect to costs and returns and involve necessarily risk. They have also a tendency to cumulative movements accelerating both their growth or decline. Now if saving is an increasing function of GDP, cumulative movements of investment – and consequently of saving – would be passed to GDP causing aggregate output to follow the path of investment disregarding and sometimes even opposing its capacity effect.

If saving is a proportional function of GDP, $S = sY$, where s denotes the average (and marginal) saving ratio, then for any I – at a constant s – we have $Y = (1/s)I$ and $\Delta Y = (1/s)\Delta I$. Thus, the higher (lower) the investment, the higher (lower) aggregate output. Assume, for instance, that investment is relatively high with respect to the capital stock, hence the capital stock increases but investment remains at this high level for a while. Under these conditions Y^* increases because of the capacity effect of I , but Y remains constant because at constant I the income effect $\Delta I = 0$ and the relation (Y/Y^*) , measuring the utilization level of capacity, decreases endangering even the existing level of investment. In Kalecki's words: 'Investments start to fall because they do not grow any more.'

5. Before we analyse in some detail the capacity utilization, it may be interesting to ask the following question: 'Given the fact that investment determines saving, how can the income effect of investment be brought under control?' The answer should be: 'The saving ratio s should be completely flexible assuring that at every level of investment, aggregate output Y would be equal to the potential one Y^* . In particular if investment I is relatively low (high), the saving ratio should also be low (high), leading always to $Y^* = I/s$ for every I . To illustrate the functioning of this mechanism, we can assume the extreme classical saving function according to which workers do not save while the capitalists do not consume. Now if investment is very low, prices of consumer goods should fall given nominal wages, and the share of wages in GDP should increase to the detriment of the share of profits. Conversely,

if investment is high, prices of consumer goods should increase given nominal wages, and the share of profits in GDP should increase to the detriment of the share of wages. In a model of perfect competition, this mechanism may be thought to work in such a way that low investment means high production of consumer goods because full utilization of resources is a basic assumption of the model. In order to find a market, prices of consumer goods would decline and shift a part of income to workers as is needed. The result would be a low saving ratio adjusted to low investment. On the other hand, high investment would lead to high prices of consumer goods and shift income to profits and saving. This mechanism does not work, at least in the sense that actual output in a capitalist economy is as a rule below its potential level. And one of the reasons for the permanent underutilization of capacity is the relative rigidity of the saving ratio combined with the volatility of investment.

The relative rigidity of the saving ratio s is due to two factors: first, the distribution of income between wages and profits does not change radically over time and, if it changes, the resulting shifts are rather small; second, the propensities to save out of these incomes are relatively stable, and if they change, the changes are rather slow. In any case, the idea that s is adjusting itself to whatever level of investment happens to occur so as to achieve always the potential level of aggregate output, is quite fantastic and contradicts the observable facts.

6. Given s we can define $S^* = sY^*$ as the level of saving corresponding to fully utilized capacity. Hence, if investment happens to be at a level $I < S^*$, the resulting GDP would be $Y = I/s$ and $Y < Y^*$.

Given $Y^* = K/v$ and $Y = I/s$ we get for the degree of capacity utilization $u = Y/Y^*$

$$u = (I/s)/(K/v) = (I/K)/(s/v) \quad (1)$$

In steady-state growth both (I/K) , the rate of growth of capital (which is also the growth rate of potential and actual GDP), and (s/v) , the relation between the saving ratio and the (technical) capital/output ratio, are constant. Therefore also u is a constant. In a capitalist economy we have as a rule $u < 1$; this is the great weakness of the capitalist economy because it cannot assure the full utilization of capacity which in normal circumstances it is able to create in abundance. This is also the source of its strength because it puts the producers under continuous pressure forcing them to compete for the consumer.

From (1) we get by logarithmic derivation

$$du/u = [d(I/K)/(I/K)] - [d(s/v)/(s/v)] \quad (2)$$

hence the degree of capacity utilization increases when the capital growth rate increases and (or) when – given v – the saving ratio growth rate decreases.

It is worth stressing that the link between the growth rate of investment and the degree of capacity utilization strengthens the cumulative tendency inherent in a capitalist economy. Indeed, when investment starts to decline, so do saving and profits, which leads to a further decline of investment. Now this tendency would be enhanced by the decline of u , the degree of capacity utilization, because it would additionally negatively influence profits and profits expectations. The same *mutatis mutandis* could be said with respect to an upward movement of investment.

7. The degree of capacity utilization is related to the employment situation if we assume, as we already did, that at u near unity there is no other than frictional unemployment only, a situation which may be approximated as full employment. Hence, the lower the degree of capacity utilization, the higher the rate of unemployment, and better utilization of capacity becomes an important tool in fighting unemployment. In a closed economy without a Government, the only way to increase u is to stimulate investment with the intention to bring it as near as possible to S^* . If we broaden the model so as to include the Government and the outside world we have

$$OSP = IP + D + E \quad (3)$$

where IP , D and E denote, as was already said, private investment, budget deficit and export surplus, all three being now offsets to private saving OSP . By breaking the budget deficit in $D = IG + CG - T = IG - SG$, we can write (3) also in the form

$$OSP = IP + IG - SG + E = DI + E - SG \quad (3')$$

where IG , CG , SG and DI denote Government investment, collective consumption, Government saving (the difference between Government revenue T and consumption expenditure CG) and domestic investment (the sum of IP and IG). Offsets to private saving OSP may now be confronted with SP^* , full employment saving, where $SP^* = sp(Y^*)$ and where sp denotes the average (and marginal) private propensity to spend out of GDP. More specifically, the utilization degree of capacity in the general model is

$$u = OSP/SP^* = (IP/SP^*) + (D + E)/SP^* \quad (4)$$

or, using (3') instead of (3),

$$u = (DI/SP^*) + (E - SG)/SP^* \quad (4')$$

The formula (4') is a general one. With $D = E = 0$ we have $u = IP/SP^*$, the formula we have used for the simplified model. If it happens that $IP < SP^*$ and private investment does not respond in a satisfactory way to policy measures intending to stimulate it, there are other possibilities to increase u and reduce unemployment, namely by increasing deficit spending $\square D > 0$ and (or) by increasing the export surplus $\square E > 0$. The goal of these measures is to bring OSP as near as possible towards SP^* . If this policy is successful, it will not only bring Y nearer to Y^* but at the same time create incentives for acceleration of

private investment growth because better utilization of capacity is a major factor determining investment decisions.

The last possibility to influence the degree of capacity utilization is lowering the propensity to save sp . Because this saving ratio depends on the distribution of income between wages and profit as well as between high and low incomes, a shift from profit to wages as well as from high to lower incomes should reduce sp and *ceteris paribus* increase the coefficient u . Indeed, with given Y^* , full employment private saving SP^* decreases when sp decreases, and with decreasing SP^* the coefficient u increases. We have thus four major venues for keeping the degree capacity utilization relatively high and unemployment relatively low. These four ways are: (1) stimulating private investment; (2) deficit spending; (3) supporting an export surplus; (4) reducing the private saving ratio.

8. It seems not accidental that in his famous paper Kalecki did not deal with the export surplus as a way to full employment. This is probably due to the fact that an export surplus in one country is necessarily an import surplus in the rest of the world. Limiting our interest in this place to the developed world only, more employment in one country via export surplus expansion would mean less employment in other countries. Therefore the 'beggar my neighbour' policy cannot be treated as a general way to full employment. Nevertheless, in any separate, especially small country this policy can be successful and in many cases it was.

The closed model implied in Kalecki's paper suffers from one basic weakness in modern circumstances. Developed countries are strongly interdependent in their external relations, especially their import intensity is high. Hence any small or even medium-size country starting alone an expansionary policy would be confronted very soon with rising imports and a deteriorating current account because increasing aggregate demand would partly flow out abroad. If foreign currency reserves are used to finance the import surplus, speculation against the domestic currency would start and further weaken it, putting sooner rather than later an end to an expansionary policy in one country alone.

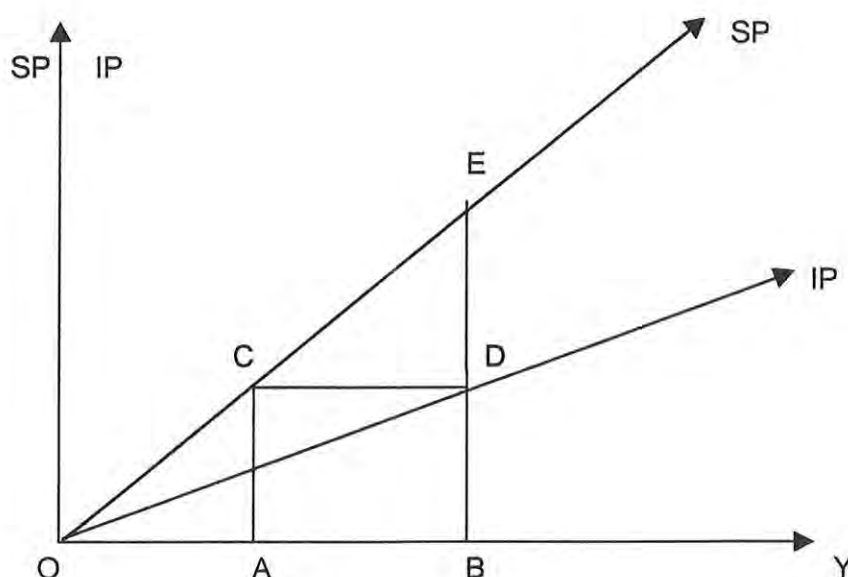
9. All four methods mentioned earlier serve the purpose of better utilization of capacity, but only one the creation of capacity itself. Let us present this problem graphically (see Figure 1).

In Figure 1, starting from the origin, we draw two lines: the line SP and the line IP . The slope of the line SP is sp , the average (and marginal) private saving ratio. The slope of the line IP is the relation $ip = (IP)/Y$, to be called private investment ratio. OB is full capacity utilization GDP denoted Y^* which is also the full employment output level. Investment IP needed to provoke an aggregate demand equal to Y^* is the distance BE which measures full employment saving SP^* . If, however, actual investment is BD , it provokes saving equal

to AC and aggregate demand equal to $Y = OA < Y^*$. Hence utilization of capacity is low and equal to $u = OA/OB$. In order to get as close as possible to Y^* , the distance DE must be filled up by stimulating IP, and if this does not work (or does not work in a satisfactory way) by engineering deficit spending D or by trying the 'beggar my neighbour policy' E. The nearer the OSP, offsets to private saving, representing the sum $IP + D + E$, to the distance BE, the nearer GDP to Y^* . There exists also the possibility to reduce the slope of the SP line by influencing sp . This would shorten the distance BE and facilitate in this way the policy of full employment.

Figure 1

**Private propensity to invest versus private propensity to save
and utilization of capacity**



It may be emphasized that the distance DE creates conditions for a policy which helps all participants of the economic process. Indeed, by increasing IP, D or E it is possible to increase incomes of workers and capitalists at the same time. This is the economic basis for co-operative capitalism in the above sense of the word. However, the redistribution of incomes implied by the turning of the SP ray is laden with social conflicts.

From the point of view of short-run full employment, there is no basic difference between the four methods presented above, but if we take into account future growth the role of private investment is unique because it creates future jobs. Therefore stimulation of private investment should be the main venue for full employment policy, and other methods should

be taken into consideration only when this main way does not yield satisfactory results. This is true but only with one reservation.

There exists a level of private investment which is necessary and sufficient to continuously recreate conditions for full employment, assuming that these conditions have existed already in the initial situation. In order to clarify this point, let us assume that the growth rate of labour productivity m is constant and determined by technical progress, the capital/output ratio over time remaining constant. This corresponds to the neutral type of technical progress as defined by Harrod and Kalecki. Let the growth rate of employment n be a constant, too. Thus the rate of growth of GDP is $g = m + n$ and represents the trend beyond the cyclical fluctuations of output. If we assume further, for the sake of simplicity, that the labour force (given the participation rate) also grows at the rate n , then full employment would continue over time.

The growth of GDP recreating continuously full employment implies, however, a corresponding growth of capital and capacity. Let us denote private capital by KP and potential output by $Y^* = KP/v$. Let Y^* be full capacity utilization GDP in the initial situation assuming at the same time full employment. Under these conditions the volume of investment required to uphold the proper relation between capacity and national income at full employment must ensure a growth rate of private capital equal to g . With an assumed constant capital/output ratio the capacity would then also grow at the rate g . Hence the degree of capacity utilization would remain constant because both GDP and capacity would grow at the same rate. We shall call this investment 'capacity-adjusted investment' and denote it in the initial situation by IP^* where $IP^* = g(KP)$.

There is no guarantee that IP^* , determined by the needs of future growth, is equal to SP^* , determined by the requirement of full employment. In terms of Figure 1 this means that IP^* can be smaller or higher than the distance BE . In developed capitalist countries we have most probably $IP^* < SP^*$, hence if $IP^* = BD$; point D would lie below point E .¹ In this situation the difference between investment as a tool to create capacity and as a tool to create the aggregate demand necessary and sufficient to achieve full employment becomes obvious. The conclusion we should draw from this reasoning is that stimulation of private investment has priority over other methods of aggregate demand management below and up to IP^* -level. Indeed, $IP > IP^*$ would be partly wasted because part of capacity created in this way could not be fully utilized under the conditions. If $IP = IP^*$ and the gap

¹ It is quite possible that in developing countries we have $IP^* > SP^*$, hence the existing saving ratio sp should be raised. But even in these countries the line IP would lie below the line SP^* because less than full utilization of capacity is an essential feature of a market economy. This means that even developing countries suffering from capacity insufficient to offer jobs for the whole labour force may and would suffer at the same time from not fully utilized capacity if aggregate demand is not satisfactory. Also the policy of increasing the saving ratio must be followed very carefully if aggregate demand is not to suffer from increasing propensity to save without a parallel increase of the propensity to invest.

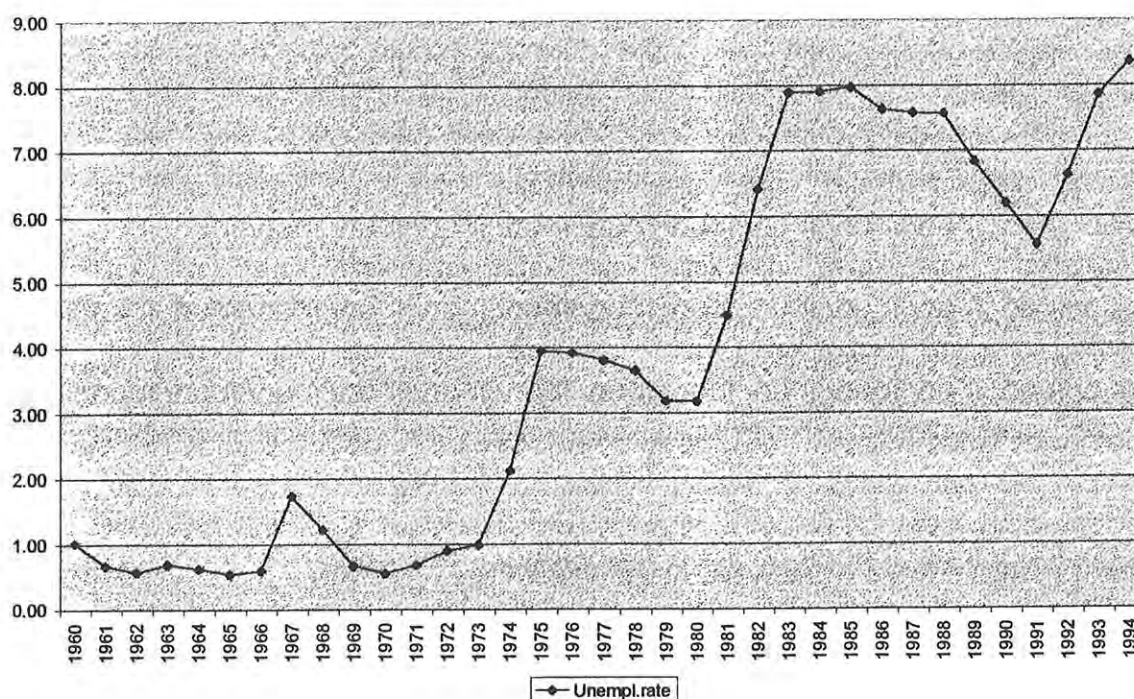
between points D and E still exists, it should be filled by deficit spending and export surplus or by reducing SP*.

III. Unemployment in Germany and aggregate demand

1. There are two discernible periods in the post-WWII economic development in Germany and in OECD-Europe: the first one until the oil crises and the second one thereafter. The first period is characterized by low, the second by high unemployment. In Germany, where the employment record is better than in most other European countries, unemployment reached the 4 per cent level at the end of the 1970s. Prior to these years unemployment was always below, thereafter always above this mark.

Figure 2

Unemployment rate in Germany in time



We have taken the year 1979 as the borderline between the two periods. The second period has to be subdivided again, because of the German unification, into the 1980-90 segment covering only Germany West and the 1991-96 segment covering unified Germany. Using this division, we get an average unemployment rate of 1.61 per cent for 1960-79 and of 7.0 per cent for 1980-96.

2. GDP is by definition the product of employment L and labour productivity y ($GDP = Ly$). We get by taking the logarithmic derivatives after time the rate of growth of GDG [$g(GDP)$] as the sum of the growth rates of L and y [$g(L)$ and $g(y)$], respectively. The rate of growth of employment is the difference between $g(GDP)$ and $g(y)$. In Table 1 we present data for Germany 1960-96. Over the whole period employment grew more slowly than labour force.

Table 1

GDP (in constant 1990 prices) and labour in Germany 1961-96

	1961-79 per cent	1980-90 per cent	1992-96 per cent	1980-96 per cent	Difference in percentage points	1960-96
g(GDP)	3.71	2.13	1.40	1.85	-1.81	2.86
g(y)	3.63	1.52	2.18	1.63	-2.0	2.71
g(L)	0.08	0.61	-0.76	0.22	-0.14	0.14
g(LF)	0.20	0.90	0.01	0.63	0.43	0.39

The reference point of our analysis is the first period, 1960-79, characterized by practically full employment and even large immigration of foreign workers from other countries. In the second period, 1980-96, demand for labour measured by $g(L)$ increased by $0.22 - 0.08 = 0.14$ percentage points while labour supply measured by $g(LF)$ increased by 0.43 percentage points. This difference resulted in a surge in the average unemployment rate from 1.61 per cent in the first period to 7.0 per cent in the second one.

The second period is, however, not homogeneous. In the first segment of this period, demand for labour increased by 0.53 percentage points and supply of labour by 0.70 percentage points compared with 1960-79, while in the second segment by -0.84 percentage points and by -0.19 percentage points, respectively. In other words, in the second segment supply of labour remained practically constant and employment decreased by about 0.8 per cent per year. The resulting average unemployment rates were 6.70 per cent and 7.50 per cent in both segments, respectively.

The demand for labour measured by $g(L)$ depends both on the rate of growth of GDP and on the rate of growth of labour productivity $g(y)$. If we divide $g(L)$ by $g(GDP)$ we get a number which we can call labour intensity of GDP growth; it measures the per cent by which employment increases when GDP increases by 1 per cent. The relation $g(L)/g(GDP)$ amounted to $0.08/3.71 = 0.022$ and $0.22/1.85 = 0.119$ in 1961-79 and in 1980-90, respectively. This means that the labour intensity of GDP growth in Germany increased in the second period compared with the first one. If the growth rate of GDP in 1980-96 had been the same as in 1961-79 (i.e. 3.71 per cent) then employment would have increased with the actual labour intensity of growth (0.119) by 0.44 per cent instead of 0.22 per cent. On the other hand, with the actual growth rate of GDP of 1.85 per cent in 1980-96 and with

the former labour intensity of growth (0.022) employment would have increased by 0.04 per cent instead of 0.22 per cent.

We have analysed this problem because some German economists argue that unemployment increased because labour productivity was rising too strongly in relation to GDP growth, substituting capital for labour (Flassbeck, 1998; Schulmeister, 1998). The right conclusion to be drawn from our analysis is quite the opposite: The main cause of the high unemployment in Germany was not high labour productivity, but the slowing down of GDP growth, the topic we are going to investigate now.

3. Before we move to this topic, let us have a short look at the labour situation in the USA. The unemployment situation between 1961-79 and 1980-96 did not change substantially although the average unemployment rate slightly increased from 5.5 per cent to 6.8 per cent. Here also the GDP growth decelerated from 3.5 per cent to 2.3 per cent. As far the labour intensity of GDP growth is concerned, it changed from $2.2/3.5 = 0.63$ in the first period to $1.4/2.3 = 0.61$ in the second one. Thus, as opposed to the German case, labour intensity of GDP growth even slightly decreased while in Germany it increased. Of course, labour productivity has always increased much more in Germany than in the USA, but it has not prevented Germany from keeping unemployment for dozens of years at a level much lower than in the USA, and it is not clear why it should now be made responsible for the rise of unemployment which has completely different causes.

Table 2

GDP (in constant 1990 prices) and labour in the USA, 1961-96

	1961-79	1980-90	1992-96	1980-96	1961-96
g(GDP)	3.5	2.3	3.0	2.3	3.0
g(y)	1.3	0.7	1.4	0.9	1.1
g(L)	2.2	1.6	1.6	1.4	1.8
g(LF)	2.2	1.5	1.3	1.4	1.8

4. Growth of GDP is caused by multiple factors, many of which are independent of the economic policies pursued. In particular, there are no spontaneous forces that in a market economy would assure – disregarding even cyclical fluctuations – an adjustment of GDP growth, and the derived demand for labour, to labour supply in such a way that the resulting unemployment remains constant. Given these conditions, the kind of policies pursued may, however, strengthen or weaken a spontaneous economic process. We shall try to show that these policies were in many cases responsible for the slowing down of growth and the surge in unemployment in Germany. In many instances they were in

contrast to those advocated by Kalecki both in the sense of not doing what was required as well as of doing what should have been avoided.

We start by presenting the growth data for Germany in 1960-90 (see Table 3). The period 1960-79 is our point of reference. The average growth rate of GDP in this period was 3.7 per cent. It was supported mostly by growth rates of OSP 3.4 per cent and of C by 4.1 per cent. The most important part of OSP, private investment, increased by an average of 3.4 per cent. OSP increased slightly faster than IP because the balance of the public sector (General Government) turned from surpluses until 1974 into deficits afterwards.

The development in 1980-90 was different. GDP growth slowed down to an average 2.4 per cent only, although the growth of OSP accelerated to 4.2 per cent. The latter, however, was not caused by an acceleration of private investment growth but exclusively by a surge in the export surplus.

Table 3

GDP, Growth and structure, Germany 1960-96
(until 1991 Germany West, since 1991 unified Germany) (constant prices, per cent)

	sp ^o	ip ^f	e ^g	d ^h	GDP	OSP	IP	C	SP
1961 ^a ratios	21.65	23.89	2.01	-4.25					
1979 ^b ratios	21.01	19.36	0.91	0.74					
average growth rate 1961-79	-0.3				3.71	3.44	2.69	4.15	3.37
1979 ^b ratios	21.01	19.36	0.91	0.74					
1990 ^c ratios	25.11	19.18	5.67	0.27					
average growth rate 1980-91	1.8				2.37	4.25	2.23	1.95	3.00
1991 ratios	22.09	20.88	-0.08	1.29					
1996 ratios	22.92	18.99	1.22	2.72					
average growth rate 1992-96	0.7				1.24	1.98	-0.7	1.49	0.8
average growth rate 1980-96 ^d	1.5								
					2.04	3.58	1.37	1.81	2.35
average growth rate 1960-96 ^d	0.6				2.92	3.51	2.07	3.04	2.88

^a average 1960-62; ^b average 1978-80; ^c average 1989-91; ^d disregarding 1991; ^e sp = OSP/GDP; ^f ip = IP/GDP; ^g e = E/GDP; ^h d = D/GDP.

Consumption growth decelerated even more strongly than that of GDP. We get the development of the private saving ratio $sp = OSP/GDP$ by taking the logarithmic derivatives after time

$$g(GDP) = g(OSP) - g(sp) \quad (5).$$

Hence the growth rate of GDP is equal to the growth rate of offsets to private saving – minus the growth rate of the private saving ratio. The data for sp and $g(sp)$ as well as related data are presented in Table 3 as well. We have calculated data for sp at the beginning and the end of each period and segment as a three-year average in order to prevent random numbers in any year.

We start with the period 1961-79 when the sp ratio declined from 21.65 per cent to 21.01 per cent, i.e. by 0.64 percentage points. This means that the growth rate of the private saving ratio was $g(sp) = -0.18$ per cent. Hence the growth rate of GDP was $g(GDP) = 3.44 + 0.18 = 3.62$.² The GDP growth was higher than that of OSP (and the more so than that of IP) because the private saving ratio measured by sp slightly declined. In other words, the influence of OSP upon GDP growth was strengthened by that of consumption growth.

The situation 1979-90 was quite different because the sp ratio increased sharply from 21.01 per cent to 25.11 per cent, i.e. by 4.1 percentage points. This means that the annual growth rate of the private saving ratio was $g(sp) = 1.8$ per cent. This increase in the private propensity to save caused a slowdown of GDP growth (from 3.7 per cent to 2.4 per cent) although $g(OSP)$ was even higher than 1961-79. The acceleration of OSP growth was caused mainly by the expansion of the export surplus. Its relation to GDP, measured by e , increased from 0.9 per cent to 5.8 per cent between 1979 and 1990. Nevertheless, the increase in the private propensity to save compensated to a large degree this external expansion.

Between 1991 and 1996 the sp ratio continued to increase, though only slightly, by 0.7 per cent per year. In the same period $g(OSP)$ diminished from 4.2 per cent in 1980-91 to only 2 per cent. The combined result of these two factors was a further slowdown of GDP growth to a yearly average of 1.2 per cent. Even this meagre result was not due to private investment (which even decreased) but to an expansion of the export surplus and the deficit of the public sector, which was more than compensated by the increase of the private propensity to save.

Taking 1960-96 as a whole, we get the following general picture. In the first period (1960-79) the GDP growth was caused mainly by the growth of OSP and IP, slightly

² The real growth rate was 3.71. The difference between 3.74 and 3.62 has been caused by calculating sp as three-year averages at the benchmarks of the period (or segment) while the growth rate of GDP refers to years.

supported by a decrease of sp. In the second period (1980-96) the influence of OSP growth upon GDP growth was weakened by an increase of sp. This pattern was especially strong in the first segment (1980-90) but continued, though to a lower degree, in the second one (1992-96) as well. In addition, in both segments the share of private investment in GDP and in OSP diminished (especially in 1991-96) while that of export surplus and of deficit spending (1991-96) increased.

5. It is worth confronting the development in Germany with that in the USA in order to find out whether there existed some general trends in the world economy which may have influenced also Germany's record.

Table 4

GDP, Growth and structure, USA 1960-96
(constant prices, per cent)

	sp ^o	ip ^f	e ^g	d ^h	GDP	OSP	IP	C	SP
1961 ^a ratios	17.41	15.95	0.77	0.70					
1979 ^b ratios	19.58	19.49	-0.96	1.05					
average growth rate 1961-79	0.6				3.5	4.4	4.8	3.4	4.2
1979 ^b ratios	19.58	19.49	-0.96	1.05					
1990 ^c ratios	17.68	15.05	-1.22	3.85					
average growth rate 1980-91	-1.1				2.3	1.4	-0.3	2.9	1.2
1991 ratios	17.75	13.59	-0.53	4.68					
1996 ratios	16.53	15.78	-1.48	2.24					
average growth rate 1992-96	-0.3				2.3	1.3	3.1	2.2	2.0
average growth rate 1980-96	-0.8				2.3	1.3	0.9	2.7	1.5
average growth rate 1960-96	0.0				3.0	2.9	2.9	3.1	2.9

^a average 1960-62; ^b average 1978-80; ^c average 1989-91; ^o sp = OSP/GDP; ^f ip = IP/GDP; ^g e = E/GDP; ^h d = D/GDP.

For details see Annex C and D.

Table 4 is constructed in a similar way as the one for Germany. We are going to stress some phenomena in the USA that may be useful for later comparisons with Germany. Growth in the USA 1961-96 was rather steady: GDP, OSP, IP and C increased almost at

the same rate. However, in the first period (1961-79) GDP growth was faster than in the second one (1980-96). In addition, growth was not steady in the second period: OSP increased by 1.3 per cent, IP by 0.9 per cent and C by 2.7 per cent. This was possible because the private saving ratio sp declined from 19.6 per cent in 1979 to 16.5 per cent in 1996, i.e. by 3.1 percentage points. Hence the sp ratio declined annually by an average of -0.8 per cent. With $g(\text{OSP}) = 1.3$ per cent, we get $g(\text{GDP}) = 1.3 - (-0.8) = 2.1$ per cent. This pattern of growth – GDP increasing faster than OSP – was especially pronounced in 1980-91 when private investment even decreased by 0.3 per cent annually.

Since the mid-1970s the USA had an import surplus mostly in the range of 1 to 3 per cent of GDP. On the other hand the General Government sector in the USA recorded 1960-96, with the exception of just two years, rather large deficits in the range of 2 to 5 per cent of GDP, especially in the 1980s. In 1980-96 the sum of $(E + D) > 0$, being a part of OSP, acted expansionary in the US economy.

6. We have now collected the most important facts in order to formulate an initial hypothesis concerning the causes of unemployment in Germany. Following Kalecki we will discuss the problem of private investment, of budget deficit and of distribution of income in this order. We start with private investment because it is, as was already said, by its very size the most important part of offsets to private saving – and also because it is the only factor that does not only influence capacity utilization but the capacity volume itself. Private investment expansion in Germany West was strong until the end of the 1970s. In the 1980s the situation changed. 1980-87 private investment stagnated and only 1988-91 – probably provoked by the approaching unification with Germany East – increased by an average 8 per cent per year. The development in the 1990s was similar to that in the 1980s; the average annual IP rate of growth 1980-96 was a meagre 1.4 per cent..

A detailed investigation of the question why investment grew so slowly in Germany – and not only there – is not possible here. We can only advance some possible reasons. One of them was the highly restrictive monetary policy of the Bundesbank oriented almost exclusively towards fighting inflation with complete neglect of its consequences for the employment situation. 'In the past 15 years' – we read in *DIW-Wochenbericht* (1997, p. 489) – 'the German Bundesbank has, with the exception of few years, followed a policy that prevented a sufficient investment dynamics . . . in the 1950s and 1960s the short-term and the longer-term real interest rates in West Germany were significantly below the real growth rate. From the end of the 1970s onwards, the short-term interest rate was about as high as the growth rate, and since the mid-1970s the longer-term real interest rate has been significantly above the income growth. In other words: Exactly since the start of the period that marked the beginning of the significant rise of interest rates in relation to growth, there has been unemployment.' The same point is stressed in a paper by

Flassbeck et al. (1997, pp. 421-22), in which the spread between the short- and long-term rates of interest is being used as a measure of monetary policy restrictiveness

The above-described highly restrictive monetary policy was simply contrary to that advocated by Kalecki under similar conditions and requiring private investment stimulation, first of all by 'cheap' money. Another possible reason of the IP slowdown is the financial position of the Non-Financial-Enterprise (NFE) sector in comparison with the Financial-Enterprise (FE) sector and the private Household (HH) sector. As can be seen in Table 5, the share of saving of the Non-Financial-Enterprise sector (S NFE) in total (national) private saving (N)SP diminished from about 57 per cent to about 53 per cent.³ Characteristic is the increase of the share of S FE by about 4 percentage points because this is a rentier sector par excellence. Indeed its propensity to investment is very low therefore its saving does not increase the capital owned by the NFE sector, which is the main real investor. Also the S HH sector increased its share by about 4 percentage points. The propensity to save of the HH sector is higher than that of the FE sector, but to a large degree these savings should be classified as rentier savings as well. The investment decisions, as stressed already, depend very much on capital owned by investing firms, hence the shift of savings from those who make investment decisions towards those who save but do not invest could not but weaken the investment drive both by limiting the capital owned by the investors and by limiting their access to the capital market.

Table 5

**Components of (National) Private Saving (N)SP
Germany 1960-96 (in per cent)**

	(N)SP	S NFE	S FE	S HH	S FE+S HH
1960-79	100	57.10	5.40	34.75	42.84
1980-90	100	52.63	8.68	38.69	47.37
1991-96	100	52.85	8.65	38.50	47.15
1960-96	100	55.11	6.90	37.99	44.89

For details see Annex F.

7. Kalecki required deficit spending whenever private investment did not fill up to a satisfactory degree the deflationary gap between SP* and actual SP as a main venue for better utilization of capacity and higher employment. Data for Germany prove that the actual development has gone rather in the opposite direction. We have already mentioned that 1980-87 private investment in Germany West practically stagnated. At about the same time the General Government sector moved from a slight deficit towards a slight surplus in 1985-86. This means that the negative influence of low private investment has been

³ The difference between (national) private saving (N)SP and private saving SP is explained in Annex E.

strengthened further by the results of a restrictive fiscal policy. If we take 1979-90 as a whole, we find out that the $ip = IP/GDP$ and the $d = D/GDP$ ratios amounted to 19.4 and 0.7 per cent at the beginning and to 19.2 and 0.3 per cent at the end of this segment, respectively. Thus the loss of 0.2 percentage points in the private investment ratio was still strengthened by a loss of 0.4 percentage points in the deficit ratio.

It is interesting to note that the development in the USA in this period differed substantially from that in Germany West. Under the guise of 'supply side' economics, the Reagan administration engineered a deficit of the General Government unique in peace times. Between 1979 and 1990 as a result of slightly declining private investment its share in GDP decreased from 19.5 to 15.0 per cent, i.e. by 4.5 percentage points. At the same time, as a result of the exploding deficit, its ratio in GDP increased from 1.0 to 3.8 per cent, i.e. by 2.8 percentage points. Thus the loss of 4.5 percentage points in the private saving ratio was partly compensated by a 2.8 percentage points increase in the deficit ratio.

In the segment 1991-96, in unified Germany the situation changed in so far as the continuing private investment weakness was now counterbalanced by rising public deficits. Indeed, their share in GDP rose from 1.3 per cent in 1991 to 2.7 per cent in 1996, i.e. by 1.4 percentage points. However, the share of private investment in GDP declined in the same period from 20.9 to 18.9 per cent, i.e. by 2 percentage points. This means that the combined result of $(ip + d)$ was in the end deflationary and was partly responsible for the further slowdown of GDP growth in this period.

However, the rising budget deficits, provoked by unexpectedly high unification costs, were not treated as a useful addition to any way insufficient aggregate demand but rather as a direct threat to price stability. Therefore, efforts have been made (without great success) to cut these deficits, but the restrictive fiscal policy could not but further aggravate the unemployment.

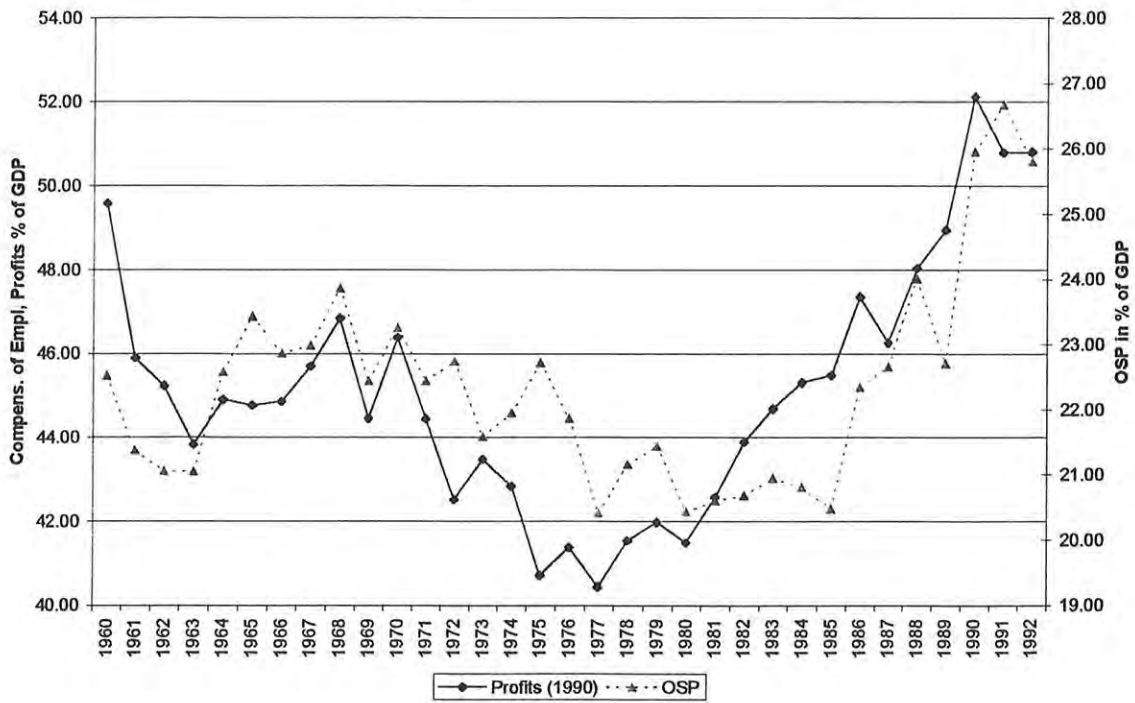
8. We have come to the last, perhaps most important factor in our analysis of the causes of high unemployment in Germany, as seen from the tool box of Kalecki. What we have in mind is the distribution of income between consumption and saving. In the segment 1979-90, in contrast to other periods, the GDP growth differed significantly from the growth of offsets to private saving, OSP. Indeed, 1961-79 GDP grew somewhat faster and 1992-96 GDP somewhat slower than OSP, but the difference amounted to only 0.3 percentage points and -0.8 percentage points, respectively. However, 1979-90 this difference was quite large with -1.8 percentage points. This rather spectacular result was due to the fact that 1980-91 (compared to 1961-79) OSP growth accelerated (from 3.4 to 4.2 per cent) while GDP growth decelerated (from 3.7 to 2.4 per cent). We know already that neither the growth of private investment nor that of the budget deficit was responsible for the acceleration of growth of OSP in 1980-91. The only item of OSP which increased

dramatically in this period was the export surplus E . The average rate of growth of E 1980-90 was 22.1 per cent; the export surplus ratio $e = E/GDP$ increased from 0.9 per cent in 1979 to 5.7 per cent in 1990, i.e. by 4.6 percentage points. The private saving ratio sp increased in the same time span from 21.0 to 25.1 per cent, i.e. by 4.1 percentage points. The surge in the volume of the export surplus *per se* must not necessarily lead to such an increase in the private saving ratio sp . If, for instance, this surge had followed an increase in foreign demand for German goods provoked *ceteris paribus* by an acceleration of economic growth in German trading partners, the saving ratio could have remained the same and the result would have been an acceleration of growth of GDP and consumption C in Germany. The export expansion had, however, other causes. Unit labour costs in Germany and prices in Germany decreased relatively to other countries, the competitiveness of German goods increased and provoked the extraordinary export surplus expansion. The other side of the coin is the slow increase of nominal and real wages in relation to labour productivity. Kalecki stressed in his early writings that an export surplus achieved through lowering domestic prices in relation to foreign prices may at the same time limit growth of internal consumption (Kalecki, 1939, 1991). This seems to have happened to some degree in Germany 1980-91. Consumption increased 1980-91 by an average of only 1.9 per cent annually compared to 4.1 per cent 1961-79. It is strange to assume that this drop was caused by supply difficulties in production for home goods but not for export goods. It is, however, easy to understand that exactly the same factors that provoked the export expansion limited internal consumption. Between 1979 and 1990 the share of consumption in GDP fell from 75.6 to 72.4 per cent, i.e. by -3.2 percentage points. The beggar-my-neighbour policy is very often criticized by the losses it causes in countries with increasing import surpluses. If our analysis is correct, it proves that this policy does not only harm the neighbours but may bring rather small advantages to the very country starting this policy.

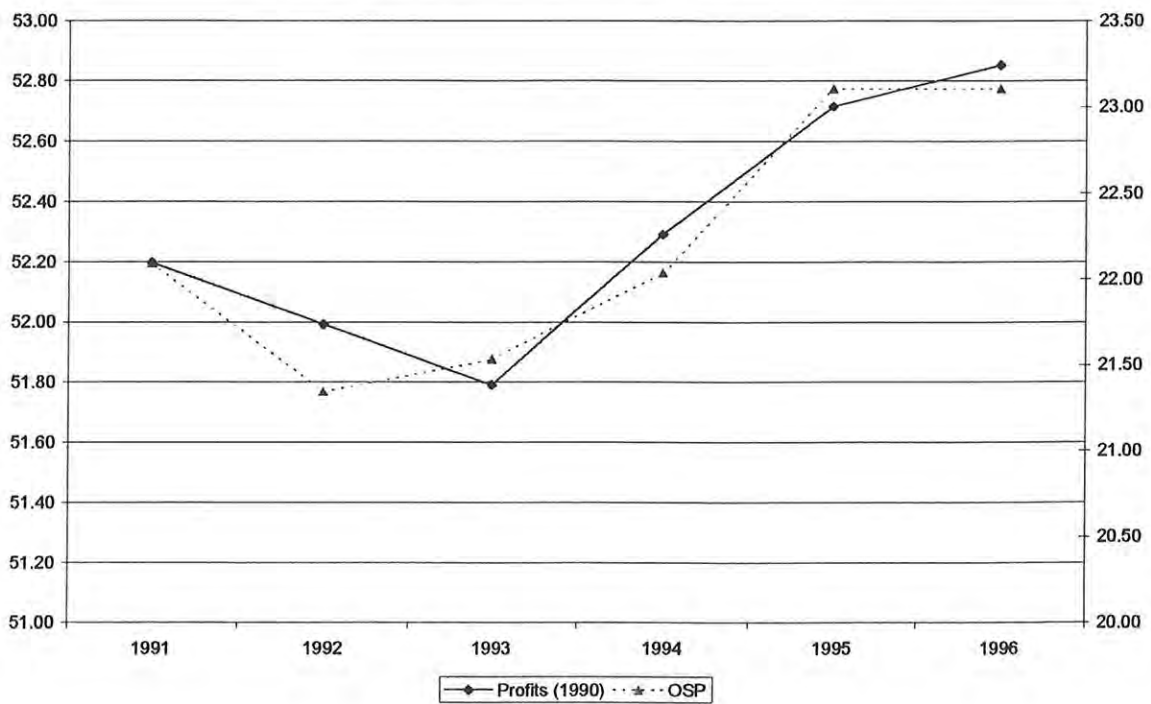
9. The increase of the private saving ratio is to a large extent responsible for increasing unemployment when private investment stagnates. But mainstream economics explain unemployment by excessive real wages. If only real wages were lower, employment could increase to the point where the decreasing real marginal product of labour would meet this lower real wage rate. Hence a restrictive nominal and real wage policy has been advised and for quite some time realized in Germany. The average real wage increased 1961-79 by 3.9 per cent while labour productivity increased by 2.9 per cent. 1980-90 the average wage increased by 0.9 per cent while labour productivity increased by 1.3 per cent. Hence, the wage share (compensation of employee/GDP) increased until the early 1970s, remained more or less constant until the 1980s and declined thereafter.

Figure 3

**Profit ratio and private saving ratio
Germany, 1960-90 (constant prices, per cent)**



**Profit ratio and private saving ratio
Germany, 1991-96 (constant prices, per cent)**



Of course the profit share (profits/GDP) developed in an opposite direction. It declined until about 1979 and from that time on increased quite steeply. The fact that the private saving ratio moved at a similar path as the profit ratio is not extraordinary as the propensity to save out of profit is much higher than out of wages. This conclusion is supported by Table 6.

Table 6

**Distribution of GDP and private saving ratios
Germany 1960-96 (per cent)**

	Wages/GDP ratio	Profits/GDP ratio	Private saving ratio
1961 ^a	48.5	46.9	21.7
1979 ^b	57.5	41.7	21.0
1990 ^c	54.3	50.6	25.1
1991	56.5	52.2	22.1
1996	53.7	52.9	23.1

^a three-year average 1960-62; ^b three-year average 1978-80; ^c three-year average 1989-91.

The parallel movement of the profit and private saving share is not accidental. But the combination of increasing private profits and savings on the one hand, and stagnating private investment on the other, is a dangerous mixture as far as the employment situation in Germany is concerned. This is exactly the opposite of what Kalecki required in his 'third' way to full employment.

10. Before we stop, let us mention yet a different way of facing low investment activity. In the USA 1979-91 private investment decreased by an average 1.3 per cent while in 1960-79 it increased by an average 4.8 per cent. This dramatic fall of investment was to a certain degree compensated by an increase in the deficit of the public sector, but nevertheless offsets to private saving OSP increased in the period discussed by an average of 1.2 per cent only versus 4.3 per cent in 1960-79. Nevertheless, GDP grew by an average of 2.0 per cent, i.e. by 0.8 percentage points faster than OSP. This was possible because consumption continued to increase in 1979-91 by an average of 2.7 per cent ahead of GDP growth. Of course, the private saving ratio could not remain constant in these circumstances. It was cut from 19.6 per cent in 1979 to 17.7 per cent in 1990, i.e. by 1.9 percentage points. This pattern prevailed to some degree also in 1991-96. The development in the USA provides thus an example of how to adjust the private saving ratio to a weak expansion of OSP, especially of private investment, although there is no trace whatsoever of a conscious policy behind this development. On the other hand, the better utilization of capacity in a dynamic context implies an increase of capacity itself in time. The growth rate of private investment in the USA in 1979-96 by an average of 0.8 per cent does not seem to guarantee an expansion of capacity adjusted to US conditions in any

longer term. Indeed, the continued existence of the distance DE in Figure 1, making room for increasing utilization of capacity, is not possible without adequate private investment.

In the USA context, the already mentioned decrease of the private propensity to save 1980-96 by 1.9 percentage points cannot be explained by a shift in distribution of GDP between wages and profits as was the case in Germany. In the USA it is rather the change of the propensity to save of the private household sector.

Table 7

**Net saving ratios of the private household sector
USA, 1990-96 (current prices; per cent)**

61 ^a	7,26
79 ^b	7,67
90 ^c	5,80
96 ^d	4,83

^a 3 years average (1960-1962), ^b 3 years average (1978-1980), ^c 3 years average (1989-1991), ^d 3 years average (1994-1996)

The net savings of the HH sector amounted to more than 7 per cent in 1961 and 1979 but dropped to 5.8 and 4.8 per cent in 1990 and 1996, respectively. These ratios declined 1979-96 by 2.9 percentage points. This difference corresponds more or less to the cut in the private propensity to save in the same time. Most probably the spectacular change in the saving attitude of the HH sector in the USA was provoked by large gains in this time in securities held by private households. If this is true, they may disappear in the future as soon as they have appeared in the past, and influence the private propensity to save in the opposite direction.

Conclusions

The recent victory of the Social Democrats in Germany and the new strategy advocated by Mr. Lafontaine and his colleagues aroused hopes that at long last the aggregate demand approach would be taken seriously and Kalecki's point of view would late but in the end prevail. This hope however did not materialize. We now see the new Government in Germany following with even greater zeal the old policy of curing unemployment by thrift and by disregarding the difference between the rehabilitation of an individual firm and the recovery of a national economy, the biggest in the EU. Probably the time is yet not ripe for a change. The situation obviously must become still worse before perhaps it starts to be better.

In a speech held on the occasion of his 65th birthday, Kalecki told us that, with few exceptions, he avoided teaching all his life and saw his role rather as an economic advisor. With one exception, however, his advice was simply ignored and found its lasting use in papers which have remained and constitute until today a rich source of inspiration for those who wish to learn. In only one case – Kalecki said – his advice was not ignored but taken account of. This happened in Israel at the very beginning of its independence. Instead of simply ignoring Kalecki's advice, the Israeli Government did exactly the opposite. It is probably the fate of his remedies that we can repeat his sarcastic remark half a century later in the German context, and not only in that one.

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Annex A

GDP in constant prices 1990
Germany, 1961-96 (growth indices)

Year	GDP	OSP	IP	C	Periods	GDP	OSP	IP	C
1961	1.046	0.993	1.030	1.053					
1962	1.047	1.031	1.033	1.059					
1963	1.028	1.028	0.958	1.040					
1964	1.067	1.144	1.134	1.039					
1965	1.054	1.093	1.088	1.067					
1966	1.028	1.003	0.953	1.035					
1967	0.997	1.002	0.866	1.019					
1968	1.055	1.095	1.130	1.034					
1969	1.075	1.011	1.157	1.062					
1970	1.050	1.089	1.086	1.041					
1971	1.031	0.994	1.000	1.046					
1972	1.043	1.056	1.023	1.051					
1973	1.048	0.994	1.029	1.044					
1974	1.002	1.019	0.841	1.026					
1975	0.987	1.022	0.874	1.038					
1976	1.053	1.014	1.194	1.038					
1977	1.028	0.960	1.002	1.036					
1978	1.030	1.068	1.048	1.024					
1979	1.042	1.056	1.160	1.038	1961-79	1.0371	1.0344	1.0269	1.0415
1980	1.010	0.962	1.001	1.025					
1981	1.001	1.009	0.894	1.017					
1982	0.991	0.995	0.925	0.990					
1983	1.018	1.031	1.096	1.010					
1984	1.028	1.021	1.034	1.022					
1985	1.020	1.004	0.982	1.017					
1986	1.023	1.117	1.015	1.001					
1987	1.015	1.029	1.006	1.020					
1988	1.037	1.099	1.082	1.025					
1989	1.036	0.980	1.083	1.022					
1990	1.057	1.208	1.090	1.043					
1991	1.051	1.080	1.084	1.044	1980-91	1.0237	1.0425	1.0223	1.0195
1991									
1992	1.022	0.993	0.989	1.027					
1993	0.988	0.992	0.921	0.999					
1994	1.027	1.047	1.075	1.016					
1995	1.012	1.059	1.014	1.012					
1996	1.013	1.010	0.973	1.020	1992-96	1.0124	1.0198	0.9933	1.0149
					1980-96	1.0204	1.0358	1.0137	1.0181
					1960-96	1.0292	1.0358	1.0207	1.0304

Annex B

OSP/GDP and related ratios
Germany, 1960-96

Year	OSP	IP	E	D GG (lg-Sg)	C	Periods	OSP	IP	E	DG(lg-Sg)
1960	22.52	24.24	2.52	-4.24	70.13					
1961	21.38	23.87	2.24	-4.74	70.58	1961	21.65	23.89	2.01	-4.25
1962	21.06	23.56	1.27	-3.77	71.41	(60-62)				
1963	21.05	21.96	1.54	-2.44	72.23					
1964	22.58	23.35	1.54	-2.31	70.35					
1965	23.43	24.12	0.28	-0.97	71.27					
1966	22.86	22.35	1.69	-1.18	71.79					
1967	22.98	19.41	3.64	-0.06	73.37					
1968	23.86	20.80	3.62	-0.56	71.91					
1969	22.44	22.40	2.80	-2.76	71.03					
1970	23.26	23.15	2.03	-1.92	70.39					
1971	22.44	22.45	1.79	-1.80	71.46					
1972	22.74	22.03	2.02	-1.31	72.04					
1973	21.58	21.64	2.94	-2.99	71.81					
1974	21.95	18.17	4.45	-0.66	73.56					
1975	22.72	16.08	2.93	3.71	77.29					
1976	21.86	18.22	2.27	1.38	76.19					
1977	20.42	17.75	2.39	0.27	76.74					
1978	21.16	18.07	2.52	0.57	76.28					
1979	21.44	20.10	0.67	0.67	75.97	1979	21.01	19.36	0.91	0.74
1980	20.43	19.93	-0.47	0.97	77.11	(78-80)	-0.0018			
1981	20.60	17.80	0.80	2.00	78.30					
1982	20.69	16.62	2.40	1.66	78.24					
1983	20.95	17.91	2.01	1.03	77.66					
1984	20.81	18.02	2.47	0.32	77.20					
1985	20.48	17.33	3.50	-0.36	76.91					
1986	22.35	17.20	5.19	-0.04	75.26					
1987	22.66	17.04	5.02	0.60	75.62					
1988	24.01	17.78	5.23	0.99	74.72					
1989	22.71	18.59	5.40	-1.28	73.72					
1990	25.96	19.17	5.85	0.93	72.74	1990	25.11	19.18	5.67	0.27
1991	26.67	19.77	5.76	1.14	72.28	(89-91)	0.018			
1991	22.09	20.88	-0.08	1.29	76.64	1991	22.09	20.88	-0.08	1.29
1992	21.48	20.22	-0.03	1.29	77.04					
1993	21.57	18.85	0.56	2.16	77.89					
1994	21.98	19.72	0.63	1.63	77.06					
1995	22.99	19.76	0.78	2.45	77.05					
1996	22.92	18.99	1.22	2.72	77.60	1996	22.92	18.99	1.22	2.72
							0.0074			

Annex C

**GDP in constant prices 1990
USA, 1961-96, growth indices**

Year	GDP	OSP	IP	C	Period	GDP	OSP	IP	C
1960									
1961	1.025	1.066	0.986	1.032					
1962	1.052	1.078	1.099	1.043					
1963	1.040	1.015	1.045	1.036					
1964	1.056	1.118	1.076	1.049					
1965	1.056	1.074	1.122	1.044					
1966	1.059	1.066	1.066	1.064					
1967	1.027	1.044	0.959	1.043					
1968	1.042	0.963	1.046	1.045					
1969	1.027	0.962	1.050	1.024					
1970	1.002	1.070	0.926	1.018					
1971	1.029	1.116	1.101	1.019					
1972	1.051	1.016	1.114	1.045					
1973	1.052	1.079	1.108	1.034					
1974	0.996	0.958	0.940	1.012					
1975	0.996	1.119	0.848	1.014					
1976	1.049	1.004	1.185	1.041					
1977	1.043	1.019	1.154	1.036					
1978	1.050	1.065	1.125	1.032					
1979	1.025	1.019	1.025	1.022	1960-79	1.0353	1.0435	1.0476	1.0343
1980	0.994	0.995	0.893	1.014					
1981	1.017	1.060	1.076	1.004					
1982	0.980	0.983	0.853	1.014					
1983	1.034	1.034	1.040	1.044					
1984	1.060	1.083	1.240	1.041					
1985	1.033	0.981	0.969	1.048					
1986	1.029	0.995	0.989	1.040					
1987	1.027	0.948	1.002	1.035					
1988	1.038	1.026	0.996	1.036					
1989	1.033	1.043	1.024	1.025					
1990	1.012	1.008	0.930	1.024					
1991	0.990	0.998	0.890	0.997	1979-91	1.0203	1.0122	0.9873	1.0266
1992	1.028	1.097	1.048	1.027					
1993	1.024	0.986	1.073	1.023					
1994	1.037	1.002	1.117	1.029					
1995	1.026	0.999	1.012	1.027	1991-96	1.0301	1.0156	1.0614	1.0273
1996	1.036	0.997	1.059	1.032	1979-96	1.0232	1.0132	on growth	1.0268
					1960-96	1.0296	1.0291	1.0290	1.0307

Annex D

**OSP/GDP and related ratios
USA, 1960-96**

Year	OSP	IP	E	D GG (lg-Sg)	C	Period	OSP	IP	E	D GG (lg-Sg)
1960	16.81	16.12	0.78	-0.10	80.65					
1961	17.49	15.51	0.87	1.11	81.21	1961	17.41	15.95	0.77	0.70
1962	17.93	16.21	0.65	1.07	80.53	(60-62)				
1963	17.49	16.29	0.78	0.42	80.21					
1964	18.52	16.60	1.02	0.90	79.71					
1965	18.83	17.63	0.74	0.46	78.84					
1966	18.95	17.74	0.44	0.77	79.14					
1967	19.26	16.55	0.38	2.33	80.36					
1968	17.81	16.61	0.09	1.10	80.58					
1969	16.69	16.98	0.09	-0.39	80.35					
1970	17.81	15.69	0.33	1.79	81.64					
1971	19.31	16.80	0.00	2.52	80.90					
1972	18.67	17.81	-0.34	1.20	80.42					
1973	19.15	18.75	0.19	0.22	79.06					
1974	18.43	17.69	-0.18	0.91	80.30					
1975	20.71	15.06	0.90	4.75	81.75					
1976	19.83	17.01	-0.19	3.00	81.16					
1977	19.37	18.83	-1.26	1.81	80.65					
1978	19.65	20.17	-1.24	0.72	79.28					
1979	19.53	20.17	-1.03	0.39	79.07	1979	19.58	19.49	-0.96	1.05
1980	19.55	18.11	-0.61	2.04	80.61	(78-80)				
1981	20.37	19.17	-0.55	1.76	79.60					
1982	20.45	16.69	-0.72	4.48	82.38					
1983	20.44	16.78	-1.63	5.29	83.18					
1984	20.87	19.62	-2.82	4.07	81.63					
1985	19.83	18.42	-2.97	4.38	82.83					
1986	19.18	17.69	-3.24	4.73	83.68					
1987	17.70	17.26	-3.32	3.76	84.32					
1988	17.51	16.58	-2.35	3.28	84.19					
1989	17.67	16.44	-1.69	2.92	83.52					
1990	17.61	15.11	-1.45	3.95	84.54	1990	17.68	15.05	-1.22	3.85
1991	17.75	13.59	-0.53	4.68	85.12	(89-91)				
1992	18.94	13.85	-0.66	5.74	84.99					
1993	18.24	14.51	-1.13	4.86	84.85					
1994	17.63	15.63	-1.54	3.54	84.18					
1995	17.17	15.42	-1.43	3.17	84.27	1995	17.11	15.61	-1.48	2.98
1996	16.53	15.78	-1.48	2.24	83.97	(94-96)				

Annex E

Statistical data on OSP and SP

From

$$GDP = C + I + E = C + IP + IG + E$$

we get with the help of

$$IG = D + SG$$

the formula

$$GDP = C + IP + D + SG + E = C + OSP + SG \quad (1)$$

because

$$OSP = IP + D + E.$$

Statistical data for (N)SP – to be called national private saving – and (N)SG – to be called national General Government saving – are calculated from GNP after subtracting from GNP the value of NROW (net transfers from the rest of the world). Therefore we have

$$GNP = C + (N)SP + (N)SG - ROW \quad (2)$$

Because

$$GNP = GDP + NFI$$

where NFI denotes net factor incomes from the rest of the world we get from (2)

$$GDP = GNP - NFI = C + (N)SP + (N)SG - ROW - NFI \quad (2')$$

From (1) and (2') we get

$$C + OSP + SG = C + (N)SP + (N)SG - ROW - NFI$$

and because we have used N(SG) as a proxy for SG we have

$$OSP = (N)SP - (ROW + NFI)$$

Annex F

**Components of (National) Private Savings
Germany (in per cent of (N)SP)**

Year	(N)SP	S Ent.	S FE	S NFE	S HH	Periods	S Ent.	S FE	S NFE	S HH
1960	100	75.31	3.11	72.20	24.69					
1961	100	71.89	3.12	68.77	28.11					
1962	100	72.86	3.43	69.44	27.14					
1963	100	68.45	3.54	64.91	31.55					
1964	100	66.70	3.67	63.03	33.30					
1965	100	64.33	4.14	60.19	35.67					
1966	100	65.51	4.57	60.94	34.49					
1967	100	66.68	3.94	62.74	33.32					
1968	100	64.12	3.35	60.77	35.88					
1969	100	59.73	4.81	54.91	40.27					
1970	100	59.88	4.66	55.22	40.12					
1971	100	59.53	5.10	54.43	40.47					
1972	100	56.62	6.01	50.61	43.38					
1973	100	56.71	6.65	50.06	43.29					
1974	100	54.34	8.42	45.92	45.66					
1975	100	51.87	8.02	43.86	48.13					
1976	100	57.68	7.10	50.57	42.32					
1977	100	58.00	7.79	50.21	42.00					
1978	100	61.27	7.98	53.29	38.73					
1979	100	59.60	8.53	51.07	40.40	1960-79	62.55	5.40	57.16	37.45
1980	100	56.45	9.52	46.93	43.55					
1981	100	52.90	10.56	42.34	47.10					
1982	100	55.97	10.12	45.85	44.03					
1983	100	64.47	10.01	54.46	35.53					
1984	100	62.75	9.69	53.06	37.25					
1985	100	62.21	8.83	53.38	37.79					
1986	100	63.82	6.99	56.83	36.18					
1987	100	63.19	7.32	55.87	36.81					
1988	100	64.89	8.51	56.38	35.11					
1989	100	64.78	7.49	57.29	35.22					
1990	100	62.98	6.48	56.51	37.02	1980-90	61.31	8.68	52.63	38.69
1991	100	59.80	8.73	51.07	40.20					
1992	100	58.83	7.87	50.95	41.17					
1993	100	59.56	8.58	50.98	40.44					
1994	100	62.14	8.96	53.18	37.86					
1995	100	64.93	8.85	56.08	35.07					
1996	100	63.77	8.90	54.87	36.23	1991-96	61.50	8.65	52.85	38.50
						1960-96	62.01	6.90	55.11	37.99

A FLEXIBILIDADE DA RIGIDEZ DE PREÇOS EM KALECKI E O PROJETO DE FUNDAÇÃO HETERODOXO-RACIONALISTA DA MACRO

Carlos Aguedo Nagel Paiva¹

1. Introdução

Patinkin inicia o seu mui justamente famoso “Flexibilidade de preços e pleno emprego” afirmando que “o argumento fundamental de Keynes é dirigido contra a crença de que a flexibilidade de preços possa ser responsável pela geração automática do pleno emprego”². Todo o esforço de seu trabalho, contudo, vai no sentido de demonstrar que o ponto efetivamente importante para Keynes era o de negar que a flexibilidade de preços pudesse conduzir **automaticamente** ao pleno emprego, e não o de afirmar que desemprego involuntário e preços flexíveis fossem compatíveis no longo prazo. Para Patinkin, ao contrário do que *por vezes* parecia pretender Keynes, não há como compatibilizar flexibilidade de preços e equilíbrio (em sentido rigoroso) abaixo do pleno emprego³.

A questão posta de forma particularmente clara por Patinkin nucleou o debate dos últimos 50 anos em torno da consistência da construção keynesiana, desdobrando-se na emergência de duas novas escolas em macroeconomia. Desde logo, a interpretação da teoria keynesiana como pressupondo preços rígidos (ou pelo menos um preço rígido: o salário nominal) e, por consequência, **desequilíbrio walrasiano** tornou-se dominante no interior do *mainstream*, e uma das principais peças de crítica ao keynesianismo por parte dos signatários da contra-revolução novo-clássica dos anos 70 e 80. A resposta do lado (novo)keynesiano veio no sentido de aceitar a incompatibilidade do desemprego involuntário com o equilíbrio **walrasiano**, mas não com padrões não-walrasianos de

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² PATINKIN, D. “Price flexibility and full employment”. *The American Economic Review*. Vol 38, 1948, pp. 543-564. Publicado no Brasil em SILVA, J.H.G. (org.) *Macroeconomia: textos escolhidos*. Fortaleza: APÉC-CAEN, s.d, pp. 49-74..

³ Segundo Patinkin, “esta é uma posição indefensável. Pois, flexibilidade significa que os salários monetários caem, se existe excesso de oferta, e sobem, se existe excesso de demanda; e equilíbrio significa que o sistema pode continuar sem mudanças através do tempo. Portanto, ‘por definição’, um sistema com preços flexíveis não pode estar em equilíbrio, se existe desemprego.” *Idem*, p. 66.

equilíbrio. Nos termos de Carlin e Soskice:

“The beginnings of the reassessment of Keynes’s theory of employment are to be found in the mid-1960s with the work of Clower (1965) and Leijonhufvud (1967, 1968). ... [These works] led to the development of the idea of so-called *non-walrasian equilibria* and was based on a rejection of the use of standard neoclassical market-clearing (Walrasian) microeconomics as the microfoundations for macroeconomics. ...

In the 1970s the non-Walrasian reinterpretation of Keynes was taken further by the work of Malinvaud (1977), whose objective was to analyse different types of unemployment. He took the opposite microeconomic benchmark from the new classical; instead of assuming rapidly clearing markets, he assumed that money wages and prices are fixed.”⁴

O problema é que, como estes dois autores reconhecem algumas páginas adiante

“there is no general agreement as to how prices are set under imperfect competition. There is [only a] general agreement that under imperfect competition prices do not respond much to changes in demand This means that the price-determined real wage curve is fairly flat. We use a flat price-determined real wage curve throughout the book”

Não gratuitamente, Frank Hahn – o mais racionalista dentre os modernos críticos do neoclassicismo – irá reagir a esta postulação empirista e pré-teórica da rigidez de salários e preços que caracteriza parcela expressiva do novo-keynesianismo, em particular seu braço europeu. E a crítica do autor apenas começa pelo reconhecimento de que Keynes

“certainly did not posit fixed prices. Rather the reverse. Nor did he seem to argue that prices change more slowly than quantities as can be verified in the chapter which tells us why labour cannot control its real wage. It seems to be far less confusing to call such equilibria Drèzian or ‘French’.”⁵

Na verdade, todo o trabalho supracitado de Hahn vai no sentido de enfrentar a pretensão de que o desemprego keynesiano tem por pressuposto preços **rigorosamente** rígidos. E isto em dois sentidos. Em primeiro lugar, porque – de acordo com o autor – é sempre possível postular-se os padrões de formação de expectativas e de demanda especulativa e precaucional por ativos não produzidos (que, como a moeda-dinheiro,

⁴ CARLIN, W. and SOSKICE, D. *Macroeconomics and the Wage Bargain*. Oxford: Oxford University Press, 1990, p. 106.

⁵ HAHN, F. “Keynesian Economics and General Equilibrium Theory: reflections on some current debates”. In. *Equilibrium and Macroeconomics*. Cambridge: MIT Press, 1984, p. 188.

servem como reservas de valor) que garantiriam o atributo de "equilíbrio" a uma situação de desemprego keynesiano, independentemente da hipótese que se faça a respeito da maior ou menor flexibilidade de preços⁶. E em segundo lugar - e aqui o busílis da questão para Hahn - porque postular preços rigorosamente rígidos em uma situação de subemprego dos fatores de produção envolveria postular a irracionalidade dos agentes, que seriam incapazes de perceber nos preços (mais exatamente, em sua flexibilização diante das distintas conjunturas) um instrumento (não exclusivo, mas nem por isto negligenciável) de conquista de mercados e/ou rendimentos.

É bem verdade que, destes argumentos, Hahn não pretenderá desenvolver a defesa *tout-court* da microeconomia de Keynes. Pelo contrário, propõe que "we simply have to live with the fact that Keynes never managed to get his micro-theory to mesh properly with the rest of what he had to say⁷. Mais do que isto: reconhece que "recent theorising ... seems to have been on the right track in arguing that Keynesian dynamics is ill served by a perfect competition postulate.⁸" Porém, o que Hahn recusa é a **postulação** da rigidez de preços. Ou, em suas palavras:

" ... one abandons the implausible view that agents consider that they can transact what they wish to at going prices when they in fact find that they cannot. ... It has led some enthusiasts to go to the extreme of fixed prices equilibrium and to call that Keynesian. But, of course, there is no good prior reason why agents should treat quantity constraints and prices parametrically. When that assumption is dropped

⁶ A este respeito, veja-se o exercício desenvolvido por Hahn às páginas 178. É de se notar, contudo, que mesmo esta construção de Hahn pressupõe alguma rigidez nos preços dos ativos que servem de reserva de valor.

⁷ Idem, *ibidem*. O que, para Hahn, desdobra-se no reconhecimento de que **os economistas keynesianos contemporâneos não podem se eximir à responsabilidade pelo desenvolvimento de uma microteoria consistente com a macro de Keynes**. Em suas palavras: "I have already noted that there are economists who wish to do [macrotheory] without a microtheory altogether. ... I can deal with this very briefly because the view is simply based based on a misunderstanding. ... About two thirds of the *General Theory* deals with the theory of the action of agents, their motives for saving and for holding money, their investment and speculative behaviour etc. It is a consequence of intellectual coarseness and not of Keynes that university syllabuses are so frequently divided in watertight macro and microeconomics courses. Even if it is granted that in the manipulative, one might almost say arithmetical, stages of Keynesian economics, relative prices play a subordinate role, it is after all the case that Keynes argues that the actions of agents in markets would not result in the equilibrium posited by his predecessors. **It is hard to see how this very important proposition is to be understood without microtheory.** Moreover the fundamental postulate that agents will not persist in actions when more advantageous ones are open to them plays a central role in the Keynesian scheme. HAHN, F. "On the notion of equilibrium in Economics". In: *Equilibrium and Macroeconomics*. Cambridge: MIT Press, 1984, pp. 63/4 (o negrito é meu).

⁸ HAHN, F. "Keynesian Economics and General Equilibrium Theory". Op. cit. p. 190.

things become more interesting and more difficult.”⁹

2. A questão da rigidez de preços na tradição pós-keynesiana

Diferentemente dos keynesianos da síntese - cuja filiação à microeconomia ortodoxa tornava a denúncia de Patinkin da incompatibilidade entre equilíbrio walrasiano e desemprego involuntário um grave problema -, a tradição pós-keynesiana jamais teve dificuldade em reconhecer a tensão entre o princípio da demanda efetiva e a hipótese clássica de que os agentes econômicos usualmente se deparam com funções demanda perfeitamente elásticas. Na verdade, toda uma literatura precoce (*vis-à-vis* a emergência do novo-keynesianismo) em torno dos fundamentos microeconômicos pertinentes à plena validação do princípio da demanda efetiva vai ser gestada em Cambridge e Oxford já na segunda metade dos anos 30 e ao longo dos anos 40 e incorporada - por um grupo expressivo de autores capitaneados por Robinson e Kalecki - ao debate macroeconômico.

Tal precocidade é facilmente explicável pelo fato de que a Cambridge de Sraffa, Robinson e Keynes e a Oxford de Hall, Hitch e Kalecki (que trabalhou em regime precário nesta instituição do final dos anos 30 a meados dos 40) estarão no centro dos debates e pesquisas empíricas que redundarão no desenvolvimento da teoria da concorrência monopolística¹⁰ e dos modelos de curva quebrada de demanda e de precificação com base no custo total. Evidentemente, não se poderia evitar algum esforço de síntese das “duas revoluções” em curso naquelas instituições universitárias.

O mais interessante, contudo, é que as propostas cambridgeana e oxfordiana de teorização da concorrência imperfeita são virtualmente antagônicas. Enquanto a teoria da concorrência monopolística é, de fato e de direito, um desenvolvimento da microeconomia marshalliana, preservando desta todas as hipóteses de racionalidade substantiva, busca de maximização de lucros e pleno conhecimento do mercado por parte dos agentes, o

⁹ Idem, p. 191.

¹⁰ Por opção de simplicidade, denominaremos os modelos de concorrência imperfeita que tomam por referência os desenvolvimentos teóricos de Robinson e Chamberlin nos anos 30 como modelos de “concorrência monopolística”; o que nos permite operar com o termo “concorrência imperfeita” em seu sentido mais amplo, como caracterizador do conjunto dos padrões competitivos (e modelos teóricos pertinentes aos mesmos) que se diferenciam, seja da concorrência perfeita, seja do monopólio puro.

modelo de precificação por custo total é incompatível com a hipótese de que os agentes buscam maximizar os lucros e/ou com a hipótese de que os agentes conheçam as funções demanda com as quais se deparam (e, em qualquer dos dois casos, com a hipótese de que os agentes sejam substantivamente racionais).

Desde logo a recusa implícita no modelo de custo total das hipóteses (na realidade, imbricadas) de que os agentes têm pleno conhecimento dos mercados e são maximizadores eficientes vai parecer atrativa àqueles intérpretes de Keynes que vêm nas reflexões deste autor sobre a incerteza (com seus rebatimentos óbvios no projeto de substantivação da racionalidade econômica) o núcleo revolucionário de sua construção. Além disso, o modelo de precificação com base no custo total foi derivado empiricamente e não lógico-dedutivamente, o que lhe empresta um atrativo particular entre economistas que se identificam com a inflexão pragmática e algo anti-cartesiana dos trabalhos de Keynes¹¹. Mas o determinante efetivamente decisivo para definir a preferência dos keynesianos heterodoxos pelo modelo de custo total é que o mesmo projeta, justamente, a estabilidade dos preços industriais que a plena validação do princípio da demanda efetiva (parece) solicita(r).

Pelo contrário, o modelo cambridgeano de concorrência monopolística – para além de todo o ônus de seu ranço dedutivo-racionalista tipicamente neoclássico – alcança certos resultados que não parecem consistentes com a microeconomia que a macro keynesiana parece (a despeito de Keynes) solicitar. Em primeiro lugar, na modelagem neoclássica original da concorrência monopolística a estabilidade dos preços diante de variações de demanda só ocorre se a elasticidade preço da demanda (a cada preço) se elevar (deprimir) com deslocamentos positivos (negativos) da função demanda, de forma a deprimir (elevar) a margem sobre o custo marginal na medida exatamente necessária à compensação da elevação (redução) deste último¹². Em segundo lugar, nesta mesma

¹¹ Para uma avaliação da inflexão empirista de Keynes e da heterodoxia cambridgeana e oxfordiana dos anos 20 e 30, veja-se o capítulo sétimo de PAIVA, C.A.N. *Valor, Preços e Distribuição: de Ricardo a Marx, de Marx a Nós*. Campinas: Unicamp, 1998 (Tese de Doutorado). Sobre a dimensão crítica dos modelos de Hall e Hitch à hipótese de racionalidade substantiva, vide SIMON, H. "From substantive to procedural rationality". In: HAHN, F. and HOLLIS, M (eds) *Philosophy and Economic Theory*. Oxford: Oxford University Press, 1974.

¹² No caso não neoclássico em que a função custo marginal é constante (como na caracterização kaleckiana das firmas industriais ou de serviços, que operam com capacidade ociosa crônica) a exigência da estabilidade de preços passa a ser a de que a função sofra deslocamentos isoelásticos. Diz-se que duas (ou mais) funções demanda são isoelásticas se ambas apresentarem a mesma elasticidade ao mesmo preço. Em termos gráficos, isto pressupõe que as projeções das tangentes aos pontos definidos pelo mesmo preço das distintas funções determinem um único

modelagem, a relação entre variações nos custos diretos/marginais e os preços não são simples e diretas (como nos usuais modelos de mark-up), e sim mediadas pela elasticidade das funções demanda, sendo tão menos significativa a resposta dos preços às quedas dos custos quanto menos elásticas forem aquelas funções aos diversos preços.

Não é de se estranhar que estas exigências (em particular a primeira) tenham parecido demasiado restritivas para aquela vertente do keynesianismo mais afeita ao realismo e à pragmática que tanto caracterizou a obra do mestre. Na verdade, segundo Paul Davidson, tais restrições já são suficientes para definir a recusa da tradição da concorrência monopolística como referência de fundação da macro keynesiana¹³.

Mas isto não é tudo. Para Davidson, o modelo de custo total apresentaria uma consistência empírico-teórica superior. Este é o argumento central do terceiro capítulo – intitulado “An overview of pricing and production – de seu *Money and real world*. Aí o autor defende o ponto de vista de que

“Which components of ... costs enter into the short-run flow-supply price depends on the factors that motivate the entrepreneur. If, as is often assumed in neoclassical economic analysis, the producer is a short-run profit maximizer *and* if he does not value the entrepreneurial effort or already committed finance necessary to bring forth any level of output, then the short-run flow-supply price will, in a competitive economy, depend solely on the marginal prime costs of materials, labour, and user costs. This is the view of short-period supply prices adopted by Keynes in *The General Theory*”¹⁴

Por oposição a esta visão do empresário – segundo a qual o mesmo segmenta a

intercepto vertical. A razão pela qual o modelo de concorrência monopolística impõe, como condição à estabilidade de preços frente a variações nas quantidades demandadas, que a nova função demanda seja isoelástica em relação à anterior é que, sendo a condição de maximização a igualdade entre custo marginal e receita marginal, e sendo esta última uma função da elasticidade ε tal que

$$RMg = P (1 - 1 / \varepsilon),$$

então, se o custo marginal for uma função constante, a elasticidade da nova função demanda deve ser estável ao preço P para que este seja o preço que garanta a maximização de lucro à nova função demanda. Voltaremos a este ponto na terceira seção quando tratarmos da versão kaleckiana da concorrência monopolística.

¹³ A este respeito, veja-se DAVIDSON, P. *Theories of aggregate income distribution*. New Brunswick: Rutgers University Press, 1960, p. 53.

¹⁴ DAVIDSON, P. *Money and the real world*. New York: John Wiley & Sons, 1972, p. 35. Os negritos são meus.

formação de preços no curto prazo do preço esperado de longo prazo, que serve de orientação para as decisões de investimento – encontra-se a visão propriamente neo-keynesiana.

“The neo-keynesian entrepreneur, as visualised by Marshall, Joan Robinson, Kaldor and Keynes of the *Treatise on Money* has somewhat different behavioural pattern than the simplistic neoclassical profit-maximiser. In essence, this neo-keynesian approach views the firm as a continuous operating unit which, at a minimum, expects to perpetuate itself over time in a ‘produce and offer in anticipation of market’ situation. Accordingly, these authors implicitly believe it would be foolish for entrepreneurs to ever commit any finance (for either fixed, working or liquid capital) to produce output for anticipated sales if there were not an expected profit on the committed finance included in the short-period flow-supply price or offer price of output. In other words, if the flow-supply price is to represent the minimum revenue required by an *on going* firm to make the contractual commitments for hiring inputs worthwhile, it must include a level of profits which the entrepreneur expects will compensate for the finance committed.”¹⁵

É interessante observar que nestas passagens Davidson reconhece o fato de que o Keynes da *Teoria Geral* não se encontraria no campo do “neo-keynesianismo”. Vale a pena acrescentar que tampouco o outro grande teórico da revolução da demanda efetiva – Michal Kalecki – o estará. Ambos compartilharão – contra o pós-keynesianismo de Davidson (e, segundo o mesmo, de Robinson e Kaldor) – de um certo apego à pretensão “neoclássica” de que a precificação no curto prazo não se confunde com o (nem se assenta no) preço esperado de longo prazo.

Contudo, antes que apresentarmos a leitura alternativa destes autores (mais especificamente, a leitura de Kalecki, que é o único a desenvolvê-la de forma rigorosa e sistemática), vale a pena observar em prol da leitura de Davidson que a consistência da mesma com o senso comum vigente no meio empresarial e - até certo ponto! – com as práticas desejadas e conscientes dos responsáveis pela precificação no interior das empresas é insofismável.

Sintomático deste fato é a polêmica que viceja na moderna literatura sobre contabilidade gerencial e administração de preços e que contrapõe defensores do

¹⁵ Idem, p. 55. Quer nos parecer que seja evidente a todos a consistência dos argumentos esgrimidos por Davidson com os argumentos desenvolvidos por Labini na tentativa de demonstrar a racionalidade da referenciação no custo total para a precificação de curto prazo. (A este respeito, veja-se a seção do capítulo terceiro intitulada “O fundamento racional do princípio do custo total” de LABINI, P. S. *Oligopólio e Progresso Técnico*. Rio de Janeiro: Forense Universitária, 1980.

processo de custeio total (por absorção e/ou por atividades) e defensores do custeio direto e da precificação e decisão de produção baseadas tão somente na “margem de contribuição”¹⁶. Este últimos – cuja superioridade no plano lógico e teórico nos parece insofismável – vão alegar contra os primeiros que a obsessão com o custo total como fundamento da precificação é absolutamente corrente; mas não é apenas equivocada: ela não se sustenta objetivamente a médio prazo por pressões do próprio mercado, e as empresas que procuram sustentá-la acabam por perder *market share* e capacidade de sobrevivência. Para estes autores, – a despeito do desejo e consciência da maioria – o processo de precificação acaba se descolando do custo total e das projeções de preço idealizadas no momento da decisão de investimento neste ou naquele negócio. Do nosso ponto de vista, esta é, também, a visão de Kalecki. Vejamos porque.

3. A teoria kaleckiana da concorrência imperfeita

Como se sabe, toda a macroeconomia kaleckiana se assenta na pressuposição de uma distinção radical entre os processos de precificação urbano-industriais e agrícola. Não gratuitamente, sua obra mais conhecida – *Teoria da Dinâmica Econômica* (doravante, TDE) - se inicia com a seguinte afirmação:

“Short-term price changes may be classified into two broad groups: those determined mainly by changes in cost of production na those determined mainly by changes in demand. Generally speaking, changes in the prices of finished goods are ‘cost-determined’, while changes in the prices of raw materials are ‘demand-determined’. ...

It is clear that these two types of price formation arise out of different conditions of supply. The production of finished goods is elastic as result of existing reserves of productive capacity. When demand increases, it is met mainly by an increase in the volume of production, while prices tend to remain stable. The price changes which do occur result mainly from changes in costs of production.

The situation with respect to raw materials is different. The increase in the supply of agricultural products requires relatively considerable time. This is true, although not to the same extent, with respect to mining.”¹⁷

A aparente aderência desta explicação de Kalecki para a estabilidade dos preços urbano-industriais à racionalização de Davidson (e Labini) do princípio do custo total é insofismável. Nesta passagem, Kalecki parece desvalorizar inteiramente a influência da

¹⁶ Para uma visão desta polêmica vide, entre outros trabalhos, GOLDRATT, E. *Síndrome do Palheiro*. São Paulo: Educator, 1996.

¹⁷ KALECKI, M. *Theory of Economic Dynamics*. In: OSIATYNSKI, J. (ed.). *Collected Works of Michal Kalecki*. (Vol. II). Oxford: Clarendon Press, 1991, p. 209.

demanda no processo de precificação urbano-industrial. Mais do que isto: Kalecki parece radicalizar a perspectiva dos teóricos do custo total, chegando a abstrair, inclusive, a influência da demanda “normal” (ou “de longo prazo”, ou “esperada”) sobre os preços¹⁸.

É de se notar, contudo, que esta “radicalização” de Kalecki já impõe uma nota dissonante à defesa da referenciação no custo total para a formação de preços. Afinal, não há como se defender estritamente a regra do custo total sem que se pretenda que o agente precificador adote uma referência de “demanda normal de longo prazo” na definição do mark-up sobre os custos diretos. Uma pretensão que Kalecki recusará afirmando que

“in view of the uncertainties faced in the process of price-fixing, it will be assumed that the firm attempts to maximize its profits in any precise set of manner. Nevertheless, it will be assumed that the actual level of overheads does not directly influence the determination of price, since the total of overhead costs remains roughly stable as output varies”¹⁹

Vale a pena observar a forma sutil – mas clara – com que Kalecki expõe as (e se recusa às) alternativas antagônicas de teorização da concorrência imperfeita: de um lado, a alternativa proto-ortodoxa da concorrência monopolística, com suas hipóteses estritas de maximização; de outro, a alternativa da precificação por custo total, que pressupõe um custo fixo unitário “normal”, cuja base “lógica” é a crença (absurda para Kalecki) de que seja possível definir a produção “normal de longo prazo”.

A crítica fundamental de Kalecki aos dois projetos suprarreferidos de teorização da concorrência imperfeita se encontra, contudo, na insuficiência, comum a ambos, do tratamento da concorrência propriamente dita; vale dizer, no tratamento da influência das demais firmas que disputam um espaço comum de mercado sobre as decisões de produção e precificação de uma firma qualquer sob consideração. Esta desconsideração relativa será objeto de auto-crítica explícita por parte de Joan Robinson em trabalhos dos anos 40 e 50²⁰; mas – a despeito do que pretendem alguns defensores do modelo de

¹⁸ Uma influência que, em Davidson e em Labini vai se imiscuir através da relação entre demanda esperada, decisão de investimento e definição da escala e do padrão técnico de produção. Como se sabe, estes últimos perfazem parcela expressiva dos custos indiretos de produção que, no modelo de precificação por custo total, devem ser levados em consideração na determinação do preço de oferta.

¹⁹ *Idem*, p. 210.

²⁰ Vide, em particular, ROBINSON, J. “Concorrência Imperfeita reexaminada”. In: *Contribuições à economia moderna*. Rio de Janeiro: Zahar, 1979, pp. 199 e segs.

custo total – ela não se dirá menos presente neste último²¹. É, na verdade, contra esta desconsideração relativa da concorrência – ou, se se preferir, “do mercado” – no modelo de precificação por custo total que se voltam as repetidas críticas de Kalecki ao mesmo²².

Na contramão destas duas alternativas, Kalecki proporá um modelo de formação de preços onde a influência dos concorrentes sobre a precificação de cada firma é admitida desde logo. Segundo o autor,

“In fixing the price the firm takes into consideration its average prime costs and the prices of other firms producing similar products. The firm must make sure that the price does not become too high in relation to prices of other firms, for this would drastically reduce sales, and that the price does not become too low in relation to its average prime cost, for this would drastically reduce the profit

²¹ Assim é que, mesmo no modelo de Sylos-Labini - que se volta explicitamente para a determinação do “equilíbrio de mercado” (entendido como aquela situação tipicamente ricardiana onde todas as empresas alcançam auferir pelo menos o “lucro normal mínimo” e as empresas líderes auferem lucros extraordinários) – pressupõe uma forte limitação à intensidade da concorrência oligopolista. Desde logo, esta limitação se expressa no fato de que os concorrentes “labinianos” não trabalham a diferenciação de serviços, produtos e/ou preços como estratégia competitiva. Neste quadro de “oligopólio homogêneo”, o equilíbrio de mercado só é obtido por Labini a partir da imposição de um conjunto de hipóteses fortemente restritivas, que envolvem: 1) a presença de expressivas economias de escala e de estabilidade dos padrões técnicos, de tal forma que as entrantes não possam se beneficiar de custos menores se operarem em escala inferior a das firmas líderes (LABINI, P. S. Op. cit. p. 81); 2) as firmas maiores e de menor custo direto aceitem (e, de alguma forma, dividem) o ônus da liderança de preços, assumindo para si toda a capacidade ociosa associada a flutuações de demanda de curto prazo; 3) as entrantes potenciais acreditam que as firmas estabelecidas retaliarão quaisquer movimentos de ingresso mantendo inalteradas suas quantidades produzidas a despeito da queda de preço e da rentabilidade oriunda desta opção (Idem, p. 87); e, *last, but not least*, 4) as firmas atuantes e “entrantes” em um dado mercado possuam uma concepção clara e unívoca do perfil da demanda de longo prazo do mesmo. Do nosso ponto de vista, tais hipóteses são inaceitáveis para Kalecki e para quem pactue de sua visão do processo competitivo capitalista como um processo diuturno que é fortemente dissolvente de qualquer estabilidade conquistada com base em acordos (tácitos ou não) e em padrões técnicos dados.

²² Veja-se, por exemplo a passagem dos *Studies in Economics Dynamics* em que Kalecki afirma: “The full-cost theory in its familiar version maintains that the firm fixes its prices by adding to a average prime cost the overheads per unit of actual output or per unit of ‘standard’ output (i.e. per unit of output corresponding to what is considered reasonably full employment of firms’ plant) and ‘something’ for profit. This statement has no precise theoretical meaning, because the amount that is added for profit makes quite a lot difference to the price and more still to the gross margin. The full-cost theory has actually been derived from the replies of entrepreneurs to enquiries about their pricing methods. But it is not unlikely that the procedure described by them is not the actual process of fixing prices but only a check applied to prices fixed in another way to see whether they make any net profit. ... the calculator seems not so much to fix the price as to translate the price fixed by other consideration into the ‘full-cost language’. In a modern cotton-spinning mill, the manager once described to me at great length the work of their calculating department. To my question, however, how the results are used to fix the prices, he replied: ‘Oh, the prices are fixed by the market’.” KALECKI, M. *Studies in economic dynamics*; in: OSIATYNSKI, J. (ed.). Op. cit., vol II, pp. 134 e 135.

margin.”²³

E a principal consequência da introdução do preço dos concorrentes na precificação de cada firma individual é a de que neste caso **já não se pode mais admitir a vigência da regra de mark-up em sua forma mais simples**. Assim é que, segundo Kalecki

“when the price p is determined by the firm in relation to unit prime cost, u , care is taken that the ratio of p to the weighted average price of all firms, p_m , does not become too high. If u increases, p , can be increased proportionally only if p_m rises proportionally as well. But if p_m increases less than u , the firm’s price p will also be raised less than u . These conditions are clearly satisfied by the formula

$$p = m u + n p_m$$

where both, m and n are positive coefficients”²⁴

Ora, esta modelagem kaleckiana do processo de precificação já alimentou um sem número de trabalhos críticos. Do nosso ponto de vista, contudo, a maior parte destas críticas advém de incompreensões alimentadas pelo estilo demasiado “telegráfico” do autor²⁵. Este é, sem dúvida, o caso das críticas à pretensa incongruência da clássica

²³ KALECKI, M. *Theory of Economic Dynamics*. Op. cit. p. 210. É de se notar que este padrão de precificação – que Kalecki pretende ser virtualmente universal – pressupõe heterogeneidade de preços e, portanto, em algum nível, de produto e serviços. Na verdade – como procuramos demonstrar em nosso trabalho de doutorado –, para Kalecki, o padrão competitivo tipicamente capitalista é o oligopólio diferenciado, que apresentaria diferentes níveis de concentração nos distintos de mercados. Mais do que isto: em Kalecki a compulsão à diferenciação – mesmo quando é mero desdobramento de diferenciais espaço-locais – é um elemento central no processo de alavancagem do grau de monopólio das distintas firmas; encontrando-se no núcleo do esforço das mesmas por conquistarem uma maior autonomia no processo de definição de seus preços frente as demais. Para maiores detalhes sobre este ponto, vide PAIVA, C. A. N. Op. cit. pp. 314 e segs. Para uma visão oposta à nossa (não apenas neste particular), veja-se KRIESLER, P. *Kalecki’s microanalysis*. Cambridge: Cambridge University Press, 1987; segundo o qual “although Kalecki (1954) refers to the vague concept of ‘semi-monopolistic’ industry, the variation of prices amongst firms in the same industry, and their independences reduces the applicability of the analysis to differentiated oligopolistic industries” (p. 64).

²⁴ Idem, *ibidem*.

²⁵ Exemplo notável (até porque oriundo de profissional de capacidade teórica inofismável) de trabalho crítico assentado em equívocos interpretativos quase banais encontra-se no ensaio de ASIMAKOPOULOS, A. “A Kaleckian theory of income distribution”. In: *Canadian Journal of Economics*. VIII, n. 3, pp. 25 e segs. Entre outras críticas equivocadas, Asimakopulos procura defender a evidenciar a inconsistência da demonstração kaleckiana de que o parâmetro n deveria ser menor do que 1 alegando que este não pode ser o caso se a firma for seguidora de preços. O que Asimakopulos não percebe é que, para Kalecki, nenhuma firma pode ser uma pura seguidora de preços, assim como nenhuma firma pode liderar o processo de formação de preços se não levar em consideração os custos e a capacidade competitiva das demais.

modelagem de 54 suprarreferida com versões anteriores (mormente a de 39/40²⁶) e posteriores (em particular a de 1971²⁷) deste autor, bem como do pretense antagonismo de cada uma destas modelagens com a precificação por mark-up, que o próprio Kalecki utiliza em diversos trabalhos seus onde a questão da formação de preços é tratada perifericamente²⁸.

Desde logo, há que se entender que – a despeito das aparências em contrário – as distintas formulações de Kalecki sobre o processo de formação de preços não pretendem ser **alternativas** ao modelo de precificação por mark-up. Pelo contrário. Todos os seus textos sobre o processo de precificação buscam, justamente, entender a racionalidade e a “dinâmica” desta “regra de bolso”. Mais especificamente, o objeto de Kalecki são os determinantes do **índice** de mark-up (e, por consequência, de suas variações). E em todas as suas modelagens o que ele busca explicitar é que, para além dos custos primários – que devem ser cobertos (ou, como já nos ensinou Marshall, a decisão de produção seria irracional) – os agentes produtores-precificadores tem de levar em consideração os preços dos concorrentes, bem como os impactos destes preços sobre as funções demanda com as quais se defrontam.

Dito isto, é preciso que se entenda, então, que a função de precificação explicitada na passagem reproduzida acima da TDE não pretende expressar analiticamente o processo decisional corrente e consciente dos agentes precificadores. Ela pretende apenas explicitar analítica e formalmente – ainda que de forma simplificada - a relação entre as duas variáveis básicas subjacentes ao processo de precificação. Nesta expressão analítica, os parâmetros m e n representam a posição do agente no mercado, seu grau de autonomia e dependência em relação aos concorrentes, ou - para ser mais exato e mais “kaleckiano” – o “grau de monopólio” dos mesmos²⁹.

²⁶ Sistematizada em KALECKI, M. “The supply curve of an industry under imperfect competition” In: OSIATYNSKI, J. Op. cit. Vol. II, pp. 51 e segs.

²⁷ KALECKI, M. “Class Struggle and Distribution of National Income”. In: OSIATYNSKI, J. Op. cit. pp. 96 e segs.

²⁸ Nos desenvolvimentos que se seguem nos apoiaremos nos importantes trabalhos de BASILE, L. e SALVADORI, N. “Kalecki’s pricing theory”. In: *JPKE*, vol. 7 (2), 1984 e CARSON, J. “Existence and uniqueness of solutions to Kalecki’s pricing equations”, *JPKE*, vol. 16 (3), p.411. A despeito das divergências (do nosso ponto de vista, menores) destes autores em torno da relação entre os modelos kaleckianos de 39/40, 54 e 71, os três convergem na perspectiva de que as diferenças entre os mesmos são antes formais do que substantivas.

²⁹ É fácil perceber que, quanto mais elevado for m_k , maior será o poder de monopólio da firma precificante (que poderá apresentar um preço p_k elevado mesmo quando p_m for baixo). E quanto maior for n_k maior é a disposição colusiva da firma. Só que esta disposição colusiva é ela mesma função da segurança (ou, pelo menos, da expectativa) que a firma tem de que a elevação de

Mas, se é assim, cabe voltar à questão – deixada em suspenso acima - da relação do(s) modelo(s) kaleckiano(s) de formação de preços e a regra de mark-up. E o que fica mais fácil de perceber agora é que, sendo o preço médio p_m da equação de precificação do modelo de 54 função dos distintos preços p_k definidos pelas k firmas e do índice de ponderação destes, o preço p_m também é função dos custos primários. E se se estabilizam todas as variáveis das quais p_m é função – a participação relativa de cada firma no mercado (que define o peso de cada p_k na definição de p_m); o padrão técnico-produtivo de cada firma (que define, ao lado dos preços dos insumos, os custos primários de cada firmas); bem como os parâmetros m e n - com exceção dos preços dos insumos primários, então fica claro que o preço p_m passa – juntamente com cada um dos distintos preços p_k - a ser função simples e direta dos custos primários de produção.

Ou, dito de outra forma: o que o modelo de precificação de 54 esclarece é que as variações nos custos primários oriundas de causas internas às firmas (variações na produtividade, por exemplo) ou associadas a variações não universais nos padrões de abastecimento (conquista de fontes privilegiadas de matérias-primas, por exemplo) não deverão ser repassados aos preços pela regra simples de mark-up; mas deverão ser parcialmente absorvidos através de variações no próprio índice de mark-up. Diferentemente, aquelas variações nos custos primários que tem um fundamento universal (variações nas taxas de salário acordadas coletivamente, por exemplo) e que afetam o conjunto das firmas simultaneamente devem ser repassados de acordo com a regra de mark-up, sem afetar este índice mesmo³⁰.

É bem verdade que sempre se poderia argumentar que a situação apresentada acima é demasiado particular, não podendo explicar a recorrência do uso da regra de

preços não exponha o seu mercado específico a ataques das concorrentes. O que significa dizer que a disposição colusiva também é função do “poder de monopólio” da firma, que é função da alavancagem competitiva derivada de sua inserção diferenciada. Mais especificamente, Kalecki proporá o preço $p_k = m_k / (1 - n_k) = p_m$, como uma medida adequada do grau de monopólio da firma k . E isto na medida em que este é o preço mais elevado que a firma k tolera sem atuar como “baixista” no mercado. Ou, mais exatamente: até este preço, o mark-up da firma é maior que o mark-up-médio, e a firma opera como “altista”, contribuindo para a elevação do preço médio. Quando $p_k = m_k / (1 - n_k)$, a firma cessa de operar como altista. Neste ponto, $p_k = p_m$ e para qualquer valor mais elevado do mark-up-médio, a firma passa a operar como baixista e $p_k < p_m$. Para maiores detalhes, vide PAIVA, C. A. N. Op. cit. pp. 314 e segs.

³⁰ Kalecki explicita e desenvolve este resultado em seu “Class Struggle and Distribution of National Income”, Op. cit. pp. 99 e segs.

mark-up nos processos efetivos e cotidianos de precificação. A questão é, sem dúvida, pertinente e complexa. Tanto mais na medida em que a hipótese (necessária à construção anterior) de que a participação relativa das distintas firmas no mercado independe dos preços absolutos definidos pelas mesmas é altamente restritiva e questionável³¹. Contudo, há que se entender que – à diferença dos defensores do princípio do custo total – Kalecki não pretende que o índice de mark-up utilizado pelas distintas firmas em seus processos de precificação seja marcadamente estável. Pelo contrário, para este autor, ele é quase tão instável quanto o são as condições de concorrência no mercado. E estas se alteram permanentemente – ainda que não abruptamente – no bojo dos processos de diferenciação, de concentração-centralização e de progresso técnico associados à acumulação de capital.

E dizemos “quase tão instável” porque há que se considerar a diferença não desprezível entre as modificações objetivas no poder competitivo e no *market-share* das distintas firmas e a percepção destas modificações por parte dos agentes relevantes. Os parâmetros m e n da função precificação do modelo de 54 que servem de base à determinação dos índices de mark-up utilizados pelas distintas firmas são referidos primariamente à percepção que as mesmas têm do seu poder de mercado, e não ao poder efetivo de que dispõem. Este último varia de forma contínua; mas a percepção desta variação é discreta. O que envolve dizer que as firmas se equivocam (e pagam preços elevados por seus equívocos) até porque a informação tarda e sua decodificação é custosa.

Do nosso ponto de vista, a já referida recusa de Kalecki à hipótese de que as firmas são maximizadoras estritas é indissociável do reconhecimento de que as mesmas não dispõem de informações atualizadas e confiáveis sobre sua inserção objetiva no mercado - vale dizer, sobre o poder competitivo e a disposição colusiva de seus concorrentes, sobre a fidelidade de sua clientela, etc. -, e, como tal, não podem avaliar de forma rigorosa os desdobramentos de eventuais modificações em suas políticas de precificação. O desdobramento objetivo desta ignorância é a estabilização relativa dos índices de mark-up para além do que seria “racional” se as condições de informação fossem distintas e mais de acordo com os pressupostos da economia ortodoxa³².

³¹ A este respeito, vide CARSON, J. Op. cit., que critica BASILE, L e SALVADORI, N. Op. cit. justamente por assumirem acriticamente esta hipótese.

³² Sobre as dificuldades dos produtores capitalistas em identificarem adequadamente suas condições de demanda e de custos, bem como suas consequências no sentido de estabilizar e

Contudo – e aqui o busílis da questão - isto não significa que, para Kalecki, as firmas abram mão de qualquer tentativa de identificar suas funções demanda e avaliar a elasticidade das mesmas no interior do processo de precificação. Pelo contrário. A referenciação de cada firma no preço (“médio”) dos concorrentes para a definição do seu próprio preço só faz sentido na medida em que se busca identificar os limites de movimentos altistas e/ou baixistas na alavancagem da receita total. O que implica reconhecer que cada firma busca (ainda que de forma insegura e cronicamente insatisfatória) definir, não apenas sua função demanda, como sua função receita marginal³³. Mais do que isto: ela busca deprimir a elasticidade destas funções a cada preço através de políticas concertadas de diferenciação que resultam na ampliação do seu grau de monopólio e – por consequência – de seu poder de precificação via mark-up.

Mas se é assim, chegamos a um resultado que, pelo menos formalmente, é o oposto da assertiva com a qual iniciamos nossa investigação sobre a microeconomia de Kalecki. No início desta seção, resgatávamos a afirmação de Kalecki de que os preços urbanos-industriais eram *cost-determined*, e se contrapunham aos preços *demand-determined* dos produtos agrícolas; e agora concluímos que, na verdade, os preços industriais são fortemente influenciados pelas condições competitivas – e, por consequência, **de demanda** – com as quais se deparam as distintas firmas.

De fato, há aqui uma contradição. Mas esta é uma contradição simples e facilmente superável. Quando Kalecki afirma que os preços dos produtos urbano-industriais são *cost-determined* ele quer dizer apenas que as variações de demanda sobre os mesmos **só podem estimular variações de preços se aquelas forem percebidas pelos agentes precificadores como capazes de afetar o seu grau de monopólio.**

Ora, não resta dúvida que tal processo pode ocorrer. Afinal, o grau de monopólio de cada firma – vale dizer, o poder de precificação e apropriação de lucros das mesmas - é indissociável da elasticidade das funções demanda com as quais as mesmas se deparam. E esta elasticidade pode variar na medida em que a própria função demanda varia. Sem dúvida. ... Só que, em Kalecki – que, neste particular, se contrapõe a Joan

tornar mais “horizontal” as funções oferta das firmas e indústrias, vide KALECKI, M. “The supply curve of na industry under imperfect competition”. Op. cit. p. 59 e segs.

³³ Mais uma vez, veja-se KALECKI, M. Op. cit. p. 60.

Robinson e aos primeiros teóricos da concorrência monopolística, que a tomam como um simulacro do monopólio – **as funções demanda de cada firma – e a elasticidade das mesmas a cada preço – são função dos preços dos concorrentes**³⁴. O que implica dizer que as flutuações de demanda com as quais se deparam cada produtor (e que são apreendidas pelos mesmos como variações nas **quantidades demandas aos preços vigentes**) não definem – e nem podem ser percebidas como - novas funções demanda estáveis. Estas só se definirão na medida em que cada um e o conjunto dos concorrentes reavaliar seus preços; o que envolverá impactos sobre os demais e sobre si mesmos em um jogo prolongado e de altíssima complexidade.

Neste quadro, as impulsões para que as variações conjunturais de demanda sejam **interpretadas** “como se” fossem variações isoelásticas (para usar a terminologia da concorrência monopolística) são muito fortes³⁵. E – como ensina a “boa ortodoxia”³⁶ - frente a variações isoelásticas de demanda, se os custos marginais forem estáveis, o preço de maximização de lucro não se alterará. *Hic Rhodus, hic salta*.

4. Conclusão

Nem os debates na macroeconomia, nem na microeconomia, estão próximos de um fim. E isto não só - nem fundamentalmente - em função das insofismáveis questões ideológicas que os permeiam. Ainda mais desalentadores do que tais questões é a complexidade mesma dos temas envolvidos.

Com isto queremos dizer que nossa aposta na atualidade dos desenvolvimentos

³⁴ É de se notar que, como Kalecki o demonstra em seu modelo de 39/40, tal interdependência não pressupõe que a estrutura competitiva seja oligopólica, mas também é pertinente a mercados de “concorrência imperfeita pura”. Vale dizer, também em mercados onde a diferenciação convive com a livre entrada e o atomismo dos produtores, o preço médio afetará as quantidades que cada produtor pode realizar aos diversos preços.

³⁵ Diga-se de passagem, estas impulsões serão tão mais fortes quanto maior for a crença de que as variações de demanda são, de fato, conjunturais e/ou cíclicas e quanto maiores forem as dificuldades em se diagnosticar o padrão efetivo de deslocamento da demanda vivido pela firma e pelo mercado. De qualquer forma, a hipótese de variação isoelástica é menos arbitrária do que poderia parecer em um primeiro momento. Na verdade, este é o perfil de variação de demanda que caracteriza deslocamentos aleatórios de consumidores, por oposição a deslocamentos estratificados, em que o próprio perfil (de renda, preferências, etc.) dos consumidores se altera.

³⁶ Pensamos aqui na ortodoxia da Joan Robinson de 32, que já reconhecia a tendência das firmas que atuam em mercados imperfeitamente competitivo de operarem com capacidade ociosa crônica e, como tal, com custos marginais constantes.

teóricos de Kalecki e na necessidade de resgatá-los para o debate econômico contemporâneo não se confunde com a crença de que este autor já teria encontrado a chave correta e definitiva para a fundação microeconômica da macro. Não se trata disto. Mas se trata, isto sim, da convicção de que a micro kaleckiana é muito superior àquelas alternativas “heterodoxas” que vêm referenciando a reflexão da maior parte dos pós, neo e novos keynesianos de plantão. Se ainda há muito o que produzir e desenvolver no campo da microeconomia heterodoxa, ousamos pretender que este muito passe pelo desenvolvimento das idéias basilares e ainda mal compreendidas deste grande mestre que foi Kalecki.

E a fecundidade que vemos nos desenvolvimentos não é gratuito. À diferença das tradições da concorrência monopolística e do custo total, a micro kaleckiana foi desenvolvida com vistas a fundar uma macro simultaneamente rigorosa e heterodoxa. E – o que é ainda mais importante – tal relação de complementariedade não implicou em qualquer enrijecimento e dogmatização da construção de Kalecki. Pelo contrário. Nada seria mais simples para Kalecki do que resgatar a tradição do custo total desenvolvida em Oxford (e paulatinamente adotada por Cambridge) e aplicá-la acriticamente aos seus modelos macrodinâmicos. (Muito provavelmente isto aumentaria a sua audiência entre os pós-keynesianos, bem como o apego de seus pares nas duas universidades mais tradicionais da Inglaterra.)

A opção de Kalecki, contudo, foi muito mais rica. Ele precisava de um sistema micro que contribuísse para a explicação da relativa estabilidade distributiva ao longo do ciclo e da virtual incapacidade dos sindicatos em conseguirem alterar a distribuição da renda através da ação sobre os salários nominais. Tal como Keynes, Kalecki precisava destes instrumentos para explicar porque a livre operação das forças de mercado não era suficiente para conduzir o sistema ao pleno emprego.

Porém, Kalecki queria mais do que explicar a estabilidade do desemprego involuntário. Queria entender os limites do próprio “equilíbrio” de subemprego. Porque sua obsessão era com a dinâmica do sistema. E um sistema dinâmico não pode ter um sistema de preços estático. Pretender a estabilidade do sistema de preços poderia ser ideologicamente oportuno (na medida em que magnificaria a rigidez distributiva do sistema), poderia parecer empiricamente consistente (especialmente numa fase do capitalismo marcada por grande estabilidade do nível geral de preços e por uma estabilidade relativa do processo de revolução técnico-produtiva), mas não parecia

teoricamente consistente a Kalecki.

E de fato não o é. Na verdade, o sistema apresenta um grau de rigidez nos preços relativos (por oposição ao nível geral de preços) que compromete a sua capacidade de auto-regular-se eficientemente. Porém também tem a flexibilidade necessária para garantir sua mobilidade e sobrevivência. E esta tensão entre rigidez e mobilidade se resolve de distintas formas nas mais distintas conjunturas. Kalecki teve a capacidade de desnudar, à frente de sua época, algumas das faces desta dialética sempre surpreendente de renovação do capitalismo. Cabe a nós completar o seu trabalho.

Ignacy Sachs*

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L'économie politique du développement des économies mixtes selon Kalecki : croissance tirée par l'emploi

Tout au long de sa vie, Kalecki s'est livré à une étude comparée du fonctionnement et de la dynamique des différents systèmes économiques.

Au début de sa carrière de journaliste économique, puis de chercheur à l'Institut de conjoncture à Varsovie, il analyse les problèmes d'une économie capitaliste, périphérique et arriérée, se débattant avec la grande crise des années 30, une structure agraire anachronique et une forte dépendance par rapport au capital étranger. A l'époque, l'on ne parle pas encore des pays sous-développés, mais la fine connaissance des réalités polonaises servira plus tard à Kalecki pour aborder les problèmes de sous-développement. Il est bon de rappeler ici que la théorie du développement, telle que nous la connaissons aujourd'hui, a été en grande partie formulée au début des années 40 en Angleterre à travers les études engagées en vue d'un programme de reconstruction des économies de l'Europe centrale et du Sud ravagées par la guerre. Les réfugiés des pays de l'Est jouèrent un rôle de premier plan dans cette entreprise intellectuelle¹.

Dès ses premiers écrits, Kalecki s'attaque aux grands problèmes théoriques du fonctionnement du capitalisme en keynesien avant la lettre². Il va affiner sa

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¹ Au Royal Institute of International Affairs à Londres un comité a été créé pour s'occuper de la reconstruction économique après la guerre. P. Rosenstein-Rodan en était le secrétaire, assisté par H.W. Arndt. Il travaillait en étroite coopération avec un groupe d'économistes et sociologues est-européens réfugiés en Angleterre. Kalecki et E.F. Schumacher animaient un groupe parallèle à Oxford Institute of Statistics. Parmi les chercheurs qui ont par la suite influencé le débat sur le développement il convient de mentionner les nombreux Hongrois (Balogh, Kaldor, Manheim, Polanyi, Scitovsky, les Polonais Lange (travaillant aux Etats-Unis), Malinowski et Rudzinski, puis H.W. Singer et K. Mandelbaum (vel Martin). L'article de Rosenstein-Rodan sur les problèmes d'industrialisation de l'Europe Orientale et Sud-Orientale, publié en 1943, est souvent cité comme le point de départ de l'économie du développement en tant que branche autonome du savoir (voir à ce sujet Arndt, H.W., "Development Economics before 1945" in Bhagwati, J.N. and Eckaus, R.D. (eds.) (1972), Development and Planning Essays in Honour of Paul Rosenstein-Rodan, Allen and Unwin, London et du même auteur "Introduction to Economics", Singapore Economic Review, vol. 29, n° 2, octobre 1984. Au Secrétariat des Nations Unies Kalecki s'est retrouvé avec H.W. Singer et W. Malinowski.

² L'anticipation de la grande théorie de Keynes par Kalecki a donné lieu à de nombreuses mises au point. Voir à ce sujet l'important article de A. Bhattacharjee et N. Rangunathan "Keynes, Kalecki and the Question of Priority", Economic and Political Weekly, 2 juillet 1988, pp. 1383-1393. Les auteurs s'attachent à mettre en

réflexion pendant les années passées en Angleterre à la veille et pendant la seconde guerre mondiale en observant le fonctionnement d'une économie capitaliste mûre et en participant activement, avec d'autres keynesiens de gauche, à l'organisation de l'effort de guerre et à la mise en place simultanée de l'Etat-providence.

Au Secrétariat de l'Organisation des Nations Unies à New York, où Kalecki travaille de 1946 à 1954, il est appelé de nouveau à se pencher sur le cas des économies périphériques et de leurs rapports avec les économies centrales. Il ne s'agit plus de la Pologne, mais des pays du tiers monde.

Kalecki continuera à s'intéresser vivement à leur développement même après avoir quitté les Nations Unies. Ses principales contributions sur le développement furent écrites au cours de la dernière étape de sa vie passée en Pologne, où il rentre en 1955. C'est à Varsovie que sous l'impulsion de Kalecki est créé un centre de recherche sur les économies sous-développées et un cours international de formation des planificateurs du tiers monde placé sous l'égide des Nations Unies. L'étude comparative des systèmes socio-économiques y occupe une place de choix.

Cependant, de retour en Pologne, devenu conseiller scientifique du président de la Commission du Plan, Kalecki se donne comme priorité l'étude du fonctionnement et des modalités de croissance d'une économie socialiste (ou en tout cas non capitaliste). Dans ses cours pour les planificateurs des pays du tiers monde, il précise les différences fondamentales entre les économies capitalistes développées limitées par la demande, les économies socialistes limitées par l'offre et les économies sous-développées qui ont en quelque sorte le pire des deux mondes : du fait du sous-développement de leur appareil productif elles sont limitées comme les économies socialistes par l'offre et elles partagent avec les économies capitalistes les problèmes de l'insuffisance de la demande effective³.

évidence les importantes différences entre les deux auteurs dans l'interprétation de la dynamique capitaliste. Voir aussi sur ce point J. Robinson ("Introduction to M. Kalecki's Essays on Developing Economies", reproduit dans *M. Kalecki, Collected Works*, vol. V, pp. 232-237). Kalecki, à la différence de Keynes, s'occupe du partage du produit entre les classes sociales.

³ Les économies sous-développées se caractérisent notamment par l'insuffisance de la demande pour les biens du secteur traditionnel qui concentre la main d'oeuvre pléthorique et par l'insuffisance de l'offre de biens provenant des industries modernes vers lesquels se porte la préférence des consommateurs aisés, la modernisation des styles de consommation précédant celle de l'appareil productif (C. Furtado). Voir à ce sujet l'article de E. Patnaik dans *Economics as Ideology and Experience : Essays in Honour of Ashok Mitra* edited by Deepak Nayyar, 1998, Frank Lars, London et la recension qu'en fait C.T. Kurien, "Impure Economics", *Economic and Political Weekly*, February 6, 1999, p. 33.

Le cercle est ainsi bouclé. Kalecki est sans doute le plus complet des économistes de sa génération, en ce sens qu'il étudia et compara tous les principaux systèmes existant au XX^{ème} siècle. Il le fit en fin observateur des réalités, doué au demeurant d'une extraordinaire capacité de théoriser sur les situations stylisées, s'attachant à en dériver des prescriptions de politiques publiques.

Les économies mixtes

Une catégorie importante, à la croisée de ses études des économies capitalistes développées et des économies sous-développées, est celle des **économies mixtes**. En font partie:

- un grand secteur privé où se côtoient les entreprises capitalistes nationales ou étrangères et la petite production marchande des villes et des campagnes ;
- un secteur public dont le poids dans le PIB peut être réduit mais qui néanmoins joue un rôle actif, voire déterminant dans le développement ;
- un dispositif de planification qui, pour Kalecki, est indispensable à la conduite rationnelle des affaires publiques dans l'économie mixte. Il partage en cela une opinion largement répandue pendant et après la seconde guerre mondiale, à l'exception des libéraux inconditionnels qui, comme von Hayek, pourfendaient l'idée même de la planification⁴. Sa définition de l'économie mixte est de ce fait plus restrictive que celle couramment employée aujourd'hui⁵.

⁴ Voir Von Hayek, F. (1944), The Road to Serfdom. Von Hayek était bien isolé dans son refus de planification. La planification était dans l'air du temps parmi les nombreux économistes britanniques et étrangers qui en pleine guerre mondiale se préparaient en Angleterre à l'implantation dans leurs pays respectifs de régimes démocratiques capables d'exorciser le souvenir de la grande crise et d'instaurer les Etats protecteurs. Pour une remarquable analyse de ce mouvement d'idées et de la radicalisation des esprits sous l'impact de la guerre, voir le chapitre "Blueprints for the Golden Age" dans M. Mazoyer (1998), Dark Continent : Europe's Twentieth Century, Allen Lara, The Penguin Press, pp. 185-214. Beveridge lui-même se convertit à l'idée de la planification d'un changement social radical au point de dire en 1940 à Beatrice Webb qu'il aurait aimé mettre à l'essai le communisme en conditions démocratiques.

Dans un chapitre antérieur, consacré à la crise du capitalisme, Mazoyer mentionne l'apport de Kalecki en le mettant en parallèle avec celui de Keynes. Chemin faisant, il attribue à ses idées une influence qu'elle n'a pas eue sur les régimes de l'Europe de l'Est : *"In Keynes, we can see the incipient rethinking of capitalism which provided guidelines for post-war policy in Western Europe ; in Kalecki, the doctrines which contributed to state socialism in the East"* (p. 140).

Au cours des années 1950-60, sous la pression des organisations internationales et même des Etats-Unis (à l'époque de l'Alliance pour le Progrès), la plupart des pays en voie de développement se livraient à des exercices de planification plus ou moins élaborés, ou carrément à des simulacres de la planification (qualifiés par C. Bobrowski de pseudoplanification).

⁵ Voir par exemple Tsuru, S. (1993), Japan's Capitalism : Creative Defeat and Beyond, Cambridge University Press, Cambridge et Kuttner, R. (1997), Everything for Sale - The Virtues and Limits of Markets, Alfred A. Knopf, New York.

La conception que Kalecki se faisait de l'Etat et de sa responsabilité et initiative dans le processus du développement peut être rapprochée de celle de l'Etat développeur (developmental State) élaborée postérieurement à partir de l'expérience du Japon et des tigres de l'Asie du Sud-Est⁶. Elle s'en distinguait cependant par la priorité accordée par Kalecki aux objectifs sociaux du développement et par le pari sur des modèles d'intervention étatique capables de limiter à terme l'emprise du capitalisme privé au lieu de la stimuler et la consolider⁷.

Des convergences encore plus marquées existent avec les idées prônées par le courant radical des cepaliens et des structuralistes latino-américains, de R. Prebisch, C. Furtado et A. Pinto à l'actuel secrétaire exécutif de la CEPAL, J.A. Ocampo, en passant par M. Wolf, A. Ferrer, F. Fajnzylber et O. Sunkel⁸.

Pour Kalecki l'Etat se devait d'être programmeur, promoteur et producteur lorsqu'il le fallait. Son attitude était pragmatique. Il appartenait à l'Etat non seulement d'indiquer les priorités de développement mais de s'assurer aussi que les investissements nécessaires y affluent⁹. Il fallait donc créer des incitations pour attirer le capital privé, mais sans pousser la politique de subventions et d'exemptions fiscales au-delà des limites qui la rendraient contreproductive. Il était en revanche légitime de s'endetter à l'étranger pour importer des biens d'équipement destinés à des projets créant des capacités d'exportation en affectant une part du flux additionnel d'exportations au remboursement de la dette¹⁰.

⁶ Voir notamment Johnson, Ch. (1982), MITI and The Japanese Miracle, Stanford University Press, Stanford ; Wade, R. (1990), Governing the Market : Economic Theory and the Role of Government in East Asian Industrialization, Princeton University Press, Princeton ; Sautter, Ch. (1987), Les dents du dragon, Orban, Paris et du même auteur La France au miroir du Japon, Odile Jacob, Paris (1996).

⁷ Sur l'analyse des différentes formes d'étatisme observées dans les pays du tiers monde à l'aide de deux modèles-types : le "japonais" et l'"indien", voir Sachs, I. (1962), Patterns of public sector in underdeveloped economies, Asia Publishing House, New Delhi.

⁸ Voir notamment Ocampo, J.A., "Beyond the Washington Consensus - An Eclac Perspective", texte présenté à la Conférence internationale organisée par l'Ecole des Hautes Etudes en Sciences Sociales en coopération avec le Programme MOST de l'UNESCO, Paris, 16-17 juin 1999 et Sunkel, O. (ed.) (1993), Development from Within : Toward a Neoliberalist Approach for Latin America, Lynne Rienner Publishers, Boulder.

⁹ Ce qui accessoirement peut entraîner la nécessité d'empêcher des investissements non prioritaires, fussent-ils privés et rentables au niveau micro-entrepreneurial, pour éviter qu'ils détournent à leur avantage les ressources rares du pays, à commencer par les devises.

¹⁰ Cette proposition de Kalecki a beaucoup intéressé S. Chakravarty. Voir son article "M. Kalecki and Development Economics" in Selected Economic Writings, Oxford University Press, Delhi, 1993, p. 239-240. D'une façon générale, la pensée de Kalecki a beaucoup influencé les planificateurs et économistes indiens notamment P.C. Mahalanobis, Pitamber Pant, K.N. Raj, S. Chakravarty, A. Mitra.

Cependant, en l'absence d'investissements privés, il appartient à l'Etat d'y suppléer par des investissements publics pour éviter que les priorités du plan ne soient pas remplies. C'est pourquoi la dynamique de l'économie mixte dépend de l'existence d'un secteur public actif.

La mobilisation des ressources intérieures occupait une place fondamentale dans la stratégie du développement prônée par Kalecki, sans qu'il s'agisse d'une vision autarcique. Quant au recours à l'aide étrangère, il n'était pas possible d'en évaluer le vrai impact sans se reporter à une analyse des modifications encourues par l'ensemble de l'économie. En effet, il se pourrait que l'offre d'un crédit étranger pour financer un projet jugé prioritaire permette de financer une consommation somptuaire avec les ressources auparavant destinées à ce projet en détournant ainsi l'aide de sa finalité¹¹.

Les économies mixtes du tiers monde présentent des variantes institutionnelles significatives. Kalecki attachait beaucoup d'importance à leur étude comparative, voire à l'ébauche d'une typologie. C'est dans ce contexte que surgit notamment le concept des "régimes intermédiaires" caractérisés par une hégémonie relativement stable de la petite bourgeoisie des villes et des campagnes et articulée en Egypte, pays qui servit de modèle, autour de l'armée. Il s'agissait d'un phénomène rendu possible par la rivalité à l'échelle mondiale de deux systèmes antagonistes. Ce concept a donné lieu à plusieurs applications et à de longues discussions dans les pays concernés (Egypte, Inde, Bangladesh)¹².

Le rôle de la planification

Kalecki consacra à l'institutionnalisation et à la méthodologie de la planification de nombreux écrits, à commencer par un important manifeste, publié d'une façon anonyme dans une revue de la gauche socialiste en Angleterre¹³.

¹¹ Voir Kalecki, M. and Sachs, I. (1966), "Forms of Foreign Aid : an Economic Analysis" in Collected Works of Michal Kalecki, vol. V, pp. 61-91.

¹² Voir Collected Works of Michal Kalecki, vol. V, pp. 6-12 et les notes pp. 200-204. Le texte de Kalecki, écrit en 1964, était une généralisation des conclusions d'une étude empirique que j'ai entreprise à sa suggestion intitulée "Sur la nature du système économique et social en Egypte". Nos deux textes furent publiés ensemble en Polonais.

L'article de Kalecki donne lieu à de nombreux écrits minutieusement recensés par J. Osiatynski pp. 203-204. Parmi les auteurs qui ont pris part au débat, il convient de mentionner M. Kula, K.N. Raj, Abdel Fadil, K.P. Jameson, R. Sobhan, M. Ahmad, P.J. Jha, J. Toye, T. Skouras et A. Mitra.

¹³ "The Minimum Essentials for Democratic Planning", Labour Discussion Notes, 35, septembre 1942 reproduit dans Collected Works of Michal Kalecki, Clarendon Press Oxford, vol. III, pp. 269-275. Socialiste

Une grande partie de son effort en Pologne est allée au perfectionnement des méthodes et des outils de la planification. Il proposa notamment des méthodologies de construction d'un plan à long terme, de l'évaluation de l'efficacité des investissements, de l'optimisation du commerce extérieur et s'attaqua, dans le cadre de la collaboration entre les pays socialistes, au problème de la construction d'un système rationnel des prix internationaux. Vers la fin de sa vie, sa réflexion critique, inspirée par les défaillances de la planification polonaise, s'est tournée vers les conditions institutionnelles indispensables au bon fonctionnement des mécanismes décisionnels : la séparation des fonctions d'élaboration et d'évaluation des projets, la nécessité d'une discussion publique rendue possible par la libre circulation d'informations et le respect du droit à l'erreur *bona fide*.

Tout en insistant sur l'importance de la planification, Kalecki en donnait une définition modeste. Pour lui, planifier c'était penser par variantes : en comparant deux ou trois trajectoires alternatives, il était possible d'en choisir une présentant plus d'avantages que les autres pour desserrer les goulets d'étranglement empêchant le plein emploi de la main d'oeuvre et des capacités de production ou d'en construire une nouvelle en les combinant entre elles. Il réservait le terme d'optimisation aux situations où la fonction objectif était homogène, comme c'est le cas du commerce extérieur¹⁴.

Le concept de l'économie mixte s'étendant à la fois aux pays sous-développés et aux pays développés, Kalecki a beaucoup réfléchi aux conditions institutionnelles minimales devant être remplies pour planifier dans le cadre d'une économie développée non socialiste¹⁵.

Ces conditions, qu'il reconnaît difficiles à remplir, sont les suivantes : contrôle des investissements, contrôle des prix mais pas des salaires, contrôle du commerce extérieur. Dans son esprit, il s'agit soit d'un programme envisageable

par ses convictions, Kalecki n'a jamais milité dans aucun parti et a toujours tenu à maintenir sa parfaite liberté intellectuelle.

¹⁴ L'optimisation dans ce cas est possible car la devise étrangère sert de dénominateur commun : il s'agit de choisir les meilleures opportunités de gagner des devises à travers l'exportation ou en économiser à travers la substitution d'importations au moindre coût en monnaie nationale par unité de devise (gagnée ou épargnée).

¹⁵ Voir Collected Works of Michal Kalecki - volume V, p. 183. Ce thème a fait notamment l'objet d'un colloque italo-polonais réalisé à l'Université d'Ancone en 1965. Malheureusement, les actes de ce colloque furent perdus. Seule est restée une brève lettre de Kalecki à Lelio Basso, dans laquelle il précise les lignes maîtresses de sa pensée.

par un gouvernement de front populaire¹⁶ soit d'un terme de comparaison pour évaluer la situation existante.

Cette dernière remarque est fondamentale pour sa pensée. Kalecki, comme nous l'avons déjà dit, était un socialiste convaincu et dans toutes ses prescriptions de politique économique, il a constamment privilégié la sauvegarde des intérêts des travailleurs : le plein emploi, la protection du pouvoir d'achat des salaires et, dès que possible, leur augmentation, la satisfaction des besoins sociaux à travers l'action de l'Etat et, pour ce qui est des paysans, l'urgence des réformes agraires. Cependant, il était suffisamment réaliste¹⁷ pour se rendre compte que les conditions d'une politique progressiste étaient rarement réunies. La planification telle qu'il la concevait pouvait toutefois servir d'étalon à l'aide duquel il était possible de juger l'écart entre la situation désirable et la situation réelle.

L'impératif de la planification concernait à plus forte raison les pays du tiers monde. Du fait du sous-développement de leur appareil de production et de l'immensité de la dette sociale à combler, ces pays n'ont pas le droit moral de gaspiller des ressources à des fins non prioritaires ou se donner le luxe de laisser les capacités sous-utilisées. Ces pays doivent augmenter considérablement leurs investissements pour accélérer l'expansion de l'appareil productif. Pour cela, il leur faut planifier non seulement le volume mais aussi la structure des investissements et leur allocation entre la production des biens de consommation essentiels, biens de consommation non essentiels et biens d'équipement¹⁸.

Par ailleurs, il leur faut mobiliser toute leur ingéniosité pour desserrer les goulets d'étranglement et gérer au mieux dans un contexte international défavorable les devises rares, de véritables jokers du jeu de planification. La barrière du commerce extérieur est en dernière instance le principal goulet d'étranglement des économies "sensibles à l'importation"¹⁹. Kalecki n'avait aucun *a priori* par rapport aux vertus respectives de la promotion d'exportations et de la substitution d'importations. Il se contentait de dire qu'à conditions égales de coût net en

¹⁶ ou de compromis historique entre la démocratie chrétienne et les communistes, comme il en était alors question en Italie.

¹⁷ A un interlocuteur qui lui a demandé pourquoi il n'a pas proposé au gouvernement indien une révolution agraire, Kalecki répondit par une boutade devenue célèbre : un pays qui veut faire la révolution ne fait pas appel aux consultants étrangers.

¹⁸ Voir "The Difference between Crucial Economic Problems of Developed and Underdeveloped Non-Socialist Economies" (1966), Collected Works of Michal Kalecki - volume V, pp. 13-19.

¹⁹ Voir à ce sujet Sachs, I. (1963), Foreign trade and economic development in underdeveloped countries, Asia Publishing House, New Delhi.

monnaie locale de la devise gagnée ou épargnée, la substitution d'importations offrait plus de garanties, car elle mettait le pays à l'abri des aléas de la conjoncture sur les marchés mondiaux.

De toute évidence, les pays *sensibles à l'importation* ont intérêt à recourir à l'importation de capitaux étrangers à condition toutefois de ne pas perdre la maîtrise du processus du développement ni de payer un prix excessivement élevé sous forme d'un service de la dette faisant boule de neige. Kalecki affichait sa préférence pour les crédits publics bonifiés, mis au service du plan de développement. Il préconisait, comme nous l'avons déjà dit, le remboursement des dettes sous forme d'exportation d'une partie des productions mises en route grâce aux prêts étrangers et recommandait que l'impact de l'aide étrangère soit toujours examiné par rapport aux changements intervenus dans l'ensemble de l'économie et non pas projet par projet.

L'emploi²⁰ et la croissance

Chez Kalecki, un style volontairement dépouillé et concis est mis au service d'une pensée rigoureuse qui va à l'essentiel et rien qu'à l'essentiel. La dynamique des systèmes économiques dépend en première instance des investissements et du progrès technique et accessoirement du rythme de la dépréciation réelle et du degré d'utilisation de l'appareil de production existant. C'est ce que rend la formule suivante :

$$r = \frac{i}{k} - a + u \quad (1)$$

où r représente le taux de croissance du PIB, i la part des investissements bruts dans le PIB, k le coefficient capital/produit, a le coefficient de dépréciation réelle et u le coefficient de meilleure utilisation de l'appareil de production existant.

Cette formule constitue le point de départ de la théorie kaleckienne de la croissance de l'économie socialiste. Dans un de ses derniers écrits²¹, Kalecki a reconnu cependant qu'elle s'applique à tous les systèmes à condition d'interpréter différemment les coefficients k , a et u . Ces derniers ont dans une économie

²⁰ Ce terme doit se comprendre comme englobant à la fois l'emploi et les différentes formes d'auto-emploi rural et urbain de façon à couvrir l'ensemble des formes de production des moyens d'existence (*livelihood* au sens que donnait à ce terme Karl Polanyi).

²¹ "Theories of Growth in Different Social Systems" (1970), *Collected Works of Michal Kalecki*, vol. IV, pp. 111-117.

capitaliste un comportement cyclique en fonction des variations de la demande effective. Dans les dépressions, u peut prendre une valeur fortement négative. Par ailleurs, la "destruction créatrice" accélère a . En revanche, dans l'économie socialiste, a peut être modulé par le planificateur et u est par principe positif grâce aux effets d'apprentissage, aux progrès organisationnels et à l'économie des ressources qui en résulte.

Kalecki emploie en même temps une seconde formule. Le taux de croissance de l'économie est sensiblement égal à la somme du taux de croissance de l'emploi e et du taux d'augmentation de la productivité du travail p résultant du progrès technique :

$$r = e + p \quad (2)$$

L'emploi apparaît donc simultanément comme **un facteur essentiel de la croissance et un objectif primordial** de celle-ci.

En effet, pour Kalecki, la recherche du plein emploi et la protection des revenus du travail constituent un impératif moral et la condition *sine qua non* d'un engagement en faveur de la justice sociale. Ses nombreuses et importantes contributions à l'étude des politiques visant la promotion du plein emploi dans les économies capitalistes développées et son texte si souvent cité sur le cycle politique du plein emploi constituent une part significative de son oeuvre²². Dans le contexte de l'économie socialiste, la poursuite du plein emploi conditionne le choix par le planificateur du prix notionnel du capital qui joue un rôle essentiel dans la formule de l'évaluation de l'efficacité des investissements mis au point par Kalecki²³. La création d'emplois constitue à plus forte raison encore le socle de sa théorie du développement et du financement de celui-ci.

Avant d'en analyser les principaux aspects, commençons par construire une typologie simple des trajectoires de croissance, dérivée de la formule 2.

La **croissance intensive** s'accompagne de la non-crédation d'emplois ; elle est entièrement tirée par l'augmentation de la productivité du travail ($r = p > 0$,

²² Voir notamment "Three Ways to Full Employment" (1943), Collected Works of Michal Kalecki, vol. I, pp. 357-376 et "Political Aspects of Full Employment, pp. 347-356.

²³ Compte tenu de l'équilibre de la balance des paiements, les investissements doivent s'établir au plus bas niveau compatible avec le plein emploi de la force de travail ("The Scope of the Evaluation of the Efficiency of Investment in a Socialist Economy" (1970), Collected Works of Michal Kalecki, vol. IV, p. 204).

$e = 0$). Un cas extrême de modernisation aux effets sociaux pervers est celui d'une croissance accompagnée de la réduction d'emplois ($p > r > 0, e < 0$).

A l'inverse, la **croissance extensive** est entièrement tirée par l'augmentation de l'emploi ($r = e > 0, p = 0$). Au cas où e augmente plus fortement que r aux dépens de p , ce qui se traduit par une réduction de la productivité sociale, nous avons affaire à des cas extrêmes de multiplication d'emplois improductifs voire fictifs²⁴.

Le taux de l'augmentation de la productivité du travail p est le socle sur lequel reposent le progrès économique et social et l'amélioration du niveau de vie, à condition que les gains de productivité soient équitablement répartis dans la société, une partie de ces gains pouvant aller à la réduction du temps de travail à salaire égal ou encore à l'allongement des périodes de formation. L'industrialisation demeure le levier principal de la transformation structurelle des économies sous-développées. Elle a un effet multiplicateur sur l'offre d'emplois dans les services. Elle permet aussi à ces pays de s'affranchir du statut d'exportateurs de matières premières et d'aspirer ainsi à une insertion plus équitable dans l'économie mondiale. En outre, un des objectifs importants du développement est d'éliminer des travaux pénibles ou malsains, ce qui passe par la mécanisation et même, dans certains cas, par l'automatisation, quel que soit le niveau du développement économique du pays.

C'est pourquoi il ne saurait être question de proposer à la longue une stratégie de développement tirée uniquement par la croissance extensive, en dépit de la gravité actuelle du chômage et du sous-emploi²⁵. Les deux types de croissance doivent trouver leur place dans la stratégie du développement. Les pays à forte offre de main d'oeuvre sous-employée, connaissant de surcroît des taux élevés de croissance démographique²⁶, se doivent d'explorer toutes les possibilités de création d'emplois et se pencher tout spécialement sur les emplois avec un coefficient capital/travail modéré dans les secteurs d'activité avec une petite composante d'importations. Il ne faut pas confondre le coefficient capital/travail t avec le coefficient capital/produit k . Les deux sont reliés par l'identité suivante : t

²⁴ C'est ce que les Brésiliens appellent d'une façon imagée "un porte-manteaux d'emplois publics" distribués aux clientèles politiques.

²⁵ Dans les pays sous-développés, ce sont les différentes formes de chômage déguisé et de sous-emploi qui prédominent, le concept de chômage ne s'appliquant rigoureusement qu'à l'économie développée ("A Note on Long-Run Unemployment" (1951), *Collected Works of Michal Kalecki*, vol. I, p. 417).

²⁶ Ce qui compte dans notre cas, c'est l'accroissement de la population en âge de travailler qui reflète les taux de croissance démographique enregistrés 15 à 20 ans plus tôt.

= k^p où p représente la productivité du travail. De nombreuses activités artisanales se caractérisent par un t faible mais la productivité du travail p extrêmement basse fait en sorte que le coefficient de capital k soit très élevé²⁷.

L'insistance sur la croissance tirée par l'emploi est d'autant plus nécessaire que les entreprises privées, poussées par la logique du marché et de la compétitivité, penchent naturellement vers la croissance intensive, voire à la modernisation perverse, se traduisant par l'obsolescence accélérée des équipements (la destruction créatrice schumpeterienne qui, à la limite, perd son caractère créateur).

La combinaison des deux croissances doit donc être biaisée en faveur de la croissance extensive. Comme cette dernière ne se bute pas à la barrière de la capacité d'importation insuffisante à l'égal des secteurs de l'économie où seule la croissance intensive rentre en ligne de compte, insister sur le potentiel de la croissance extensive revient à accélérer, *ceteris paribus*, le taux de la croissance de l'économie nationale.

Jusqu'où peut-on pousser cette manoeuvre ? Je pense que la partie la plus originale de la théorie du développement selon Kalecki tourne autour de cette question.

Au vu du dénuement des travailleurs, il faut s'attendre à ce que leur pouvoir d'achat accru grâce aux nouveaux emplois aille tout entier à l'achat des biens de consommation essentiels, à commencer par les denrées alimentaires. C'est pourquoi la capacité de produire ces biens constitue la principale limite à la création d'emplois assurant une croissance sans inflation²⁸. C'est à l'augmentation de l'offre des biens essentiels que se ramène le financement réel de la croissance tirée par l'emploi,

²⁷ C'était notamment le cas du rouet gandhien pourtant amélioré (*ambar charka*), comme l'ont montré les analyses menées au cours des années 50 par Amartya Sen et Charles Bettelheim. La filature à la main était économiquement inviable en Inde. En revanche, le tissage à la main dans les conditions indiennes se justifiait, même s'il demandait une subvention croisée de la part de l'industrie textile moderne (une surtaxe sur les produits de l'industrie moderne permettant de subventionner les artisans de façon à égaler les prix sur le marché).

A l'inverse, certaines petites industries modernes se caractérisent par un coefficient capital/produit k faible et un coefficient capital/travail élevé. La distinction que fait la littérature indienne entre *cottage industries* et *modern small-scale industries* est très pertinente. Les petites industries modernes ont leur place dans la stratégie du développement, même si elles ne créent pas beaucoup d'emplois directs, parce qu'elles permettent de valoriser les talents entrepreneuriaux et l'épargne privée d'anciens artisans, commerçants et ouvriers spécialisés. L'exemple de la *terza Italia* est à ce sujet significatif. Ces industries finissent par avoir un impact sur l'emploi du fait de leur nombre et des effets d'entraînement qu'elles exercent sur les économies locales.

²⁸ Kalecki a été un pionnier de la théorie structuraliste de l'inflation qui connut un essor tout particulier en Amérique Latine. Voir sur ce point Dell, S. (1977), "Kalecki and the United Nations", *Oxford Bulletin of Economics and Statistics* 39/1, pp. 40-42 et Arndt, H.W. (1985), "The Origins of Structuralism", *World Development* 13/2.

alors qu'au plan financier proprement dit un tel développement peut se fonder sur le prélèvement d'une partie des revenus des classes aisées²⁹.

Ainsi, dans son article consacré au développement de l'Inde, Kalecki souligne que le problème d'éviter les pressions inflationnistes dans le développement économique n'est pas «monétaire». Il se résout en assurant, par des méthodes variées, une structure correcte de la dépense nationale, trois conditions devant être remplies à cette fin : l'offre adéquate des biens essentiels, la limitation des dépenses allant à l'achat des biens non essentiels de façon à créer l'épargne adéquate pour financer l'investissement privé et public, la limitation des investissements privés de façon à utiliser une partie de l'épargne privée pour financer les investissements publics (qui, rappelons-le, étaient très importants dans la stratégie du développement adoptée par l'Inde). La réforme fiscale en Inde pourrait consister, d'une part, en une défiscalisation complète d'un nombre très restreint de biens essentiels constituant la quasi totalité de la consommation des couches défavorisées de la population et, d'autre part, une imposition fortement progressive des biens non essentiels³⁰.

Kalecki a donné un résumé extrêmement succinct de sa théorie dans l'article déjà cité de 1970³¹:

"Il me semble que le problème central ici (dans les économies mixtes sous-développées) est (de savoir) aux dépens de qui le pays doit se développer. Aussi longtemps que se maintiennent les pressions inflationnistes sur l'offre insuffisante des biens essentiels, en particulier des denrées alimentaires, ce sont les masses appauvries de la population qui supportent le fardeau de l'investissement élevé. Si cela doit être évité, le taux de croissance de l'offre des biens essentiels doit accompagner le taux de croissance du revenu national. Et pour laisser la place à l'investissement, la consommation des biens non essentiels par les ayant des revenus plus élevés doit être limitée par une politique fiscale appropriée. Cela fait cependant dépendre le taux de croissance "non inflationnaire" des conditions agraires parce que celles-ci déterminent

²⁹ Voir en particulier les textes suivants de Kalecki : "The Problem of Financing Economic Development" (1954) et "Problems of Financing Economic Development in a Mixed Economy" (1963), Collected Works of Michal Kalecki, vol. V, pp. 23-44 et 45-60 ainsi que "Financial Problems of the Third Plan : Some Observations" (1966) ; il s'agit de l'Inde. Ibidem pp. 122-128.

³⁰ Le sucre non raffiné serait défiscalisé, mais il n'en serait pas de même pour la différence de prix entre les deux qualités de sucre. Il en serait de même pour les différentes qualités de tissus de coton. La réforme proposée par Kalecki constituait une version radicale de l'approche appliquée dans les pays occidentaux à la définition des barèmes de la TVA.

³¹ "Theories of Growth in Different Social Systems", Collected Works of Michal Kalecki, vol. IV, p. 115.

dans une grande mesure le progrès faisable en agriculture et donc l'offre des biens essentiels. Dans ce contexte, c'est la capacité de cultiver plus rapidement les produits alimentaires qui tient le rôle principal dans le "financement" du développement. Il faut toutefois l'appuyer par des mesures financières au sens strict destinées à freiner l'augmentation de la consommation des biens non-essentiels".

L'on comprend dès lors l'importance que Kalecki attachait aux réformes agraires. En leur absence, l'offre des produits alimentaires n'arriverait pas à progresser à un rythme satisfaisant, créant une poussée inflationniste qui se traduirait par une érosion inadmissible du pouvoir d'achat des revenus des travailleurs.

Par ailleurs, il importait de tirer le meilleur parti des potentialités latentes de l'économie paysanne avec ses réserves de main d'oeuvre familiale mises en évidence par les écrits de Chayanov dont l'oeuvre faisait l'objet de grandes discussions en Pologne après 1956³². L'essor de l'agriculture paysanne était donc doublement important : pour desserrer une contrainte majeure à la création d'emplois non-agricoles et pour assurer une amélioration des conditions de vie de la majorité des habitants du tiers monde. L'industrialisation du tiers monde devait se faire *sans dépayannisation* ou tout au moins sans dépayannisation précipitée³³.

Kalecki ne préconisait pas pour autant la multiplication des grands chantiers mobilisant des dizaines de milliers d'ouvriers travaillant à la pelle, comme ce fut le cas pendant le grand bond en avant en Chine. Il était très conscient des problèmes d'intendance, d'organisation et de dérive autoritaire posés par l'"investissement humain" et le travail contraint.

Le choix des techniques

Kalecki prit une part active dans le débat sur le choix des techniques suscité par les livres bien connus de M. Dobb et A.K. Sen³⁴. Il ne partageait pas les vues de

³² C'est le lieu de rappeler la singularité du modèle de développement polonais : la collectivisation de l'agriculture fut vite abandonnée et la transition polonaise au socialisme s'accommodait de l'existence d'un grand secteur d'économie paysanne. Voir à ce propos Tepicht, J. (1973), Marxisme et agriculture : le paysan polonais, A. Colin, Paris. Voir aussi Tchaianov, A.V. (1990), L'organisation de l'économie paysanne, Librairie du Regard, Paris.

³³ J'emprunte le terme "dépayannisation" à Ismail-Sabri Abdalla, "Dépayannisation ou développement rural ? Un choix lourd de conséquences", IFDA Dossier n° 9, juillet 1979, pp. 3-15.

³⁴ Dobb, M. (1960), An Essay on Economic Growth and Planning, Routledge and Kegan Paul ; Sen, A.K. (1960), Choices of Techniques, Blackwell, Oxford. Pour les détails de cette polémique, voir les notes de J. Osiatynski, Collected Works of Michal Kalecki, vol. V, pp. 188-190.

ces deux auteurs qui recommandaient la maximisation du surplus pouvant être investi plutôt que celle du produit, ce qui impliquait le recours à des techniques intensives en capital. Il trouvait que les pays disposant d'une main d'oeuvre pléthorique devaient utiliser chaque fois que possible des techniques intensives en main d'oeuvre.

D'autant plus que les marges de liberté sont doublement limitées : par les techniques déjà incorporées à l'appareil de production, dont la transformation va s'échelonner sur de longues années et par la structure sectorielle de nouveaux investissements, certaines branches de l'économie ne comportant pas de solutions techniques créatrices d'emplois. L'exemple extrême est celui de l'extraction du pétrole. A l'inverse, il est des activités qui par leur nature demandent beaucoup de main d'oeuvre, notamment dans le domaine des services, du bâtiment ou de l'agriculture. Il faut donc, dans la mesure du possible, leur donner la part belle dans la fonction objectif.

A la longue, l'éventail des techniques disponibles aux paramètres désirés dépendra de l'orientation donnée à la recherche et des moyens qui lui seront destinés³⁵.

La modernisation de l'agriculture mérite que l'on s'y attarde. En effet, le capital investi dans l'agriculture fonctionne tantôt comme substitut de la main d'oeuvre (la mécanisation entraînant l'augmentation de la productivité du travail), tantôt comme substitut de la terre (irrigation, engrais, pesticides se traduisant par l'augmentation des rendements à l'hectare)³⁶.

Dans le premier cas, l'on avance dans la direction d'une agriculture sans hommes destructrice des emplois. Nous sommes en présence d'une modernisation perverse³⁷. Dans le second cas, le progrès technique s'accompagne fréquemment

³⁵ Pour l'économie considérée comme un tout, à chaque moment il existe une courbe concave CC' de solutions techniques efficaces combinant des quantités différentes de capital et de main d'oeuvre. Le progrès technique consiste dans le déplacement de cette courbe vers le bas et la gauche. Contrairement à un préjugé, le progrès technique n'est pas nécessairement biaisé dans le sens d'une plus grande intensité de capital. Il peut être neutre ou même biaisé dans le sens d'une plus grande intensité de main d'oeuvre. Cependant, seuls certains points sur cette courbe continue comportent des solutions techniques susceptibles d'application pratique. La recherche doit donc s'attacher aussi à augmenter le nombre de ces points sur le segment qui nous intéresse plus particulièrement (l'extrémité droite de la courbe).

³⁶ Voir Sachs, I. (1970), "Selection of Techniques : Problems and Policies for Latin America", *Economic Bulletin for Latin America*, Santiago, vol. XV, n° 1, pp. 1-34.

³⁷ Voir à ce sujet David, B. (1997), *Les transformations de l'agriculture brésilienne : une modernisation perverse (1960-1995)*, Paris : Ecole des Hautes Etudes en Sciences Sociales, Centre de Recherches sur le Brésil Contemporain ; NUSEG/UERJ, Rio de Janeiro, 485 p.

de l'augmentation de l'emploi, surtout lorsqu'il est conjugué avec le choix des cultures et activités connexes qui par leur nature demandent beaucoup de main d'oeuvre (horticulture, floriculture, certains élevages). D'où l'insistance de Kalecki sur les rendements à l'hectare comme un objectif majeur du développement³⁸. Les choses se compliquent lorsque la mécanisation est rendue nécessaire pour accélérer certains travaux des champs de façon à permettre le passage d'une à deux récoltes annuelles.

En tout état de cause, les choix techniques en agriculture dépendent pour une grande part de la composition des cultures et autres activités entreprises par les familles paysannes, de plus en plus plurifonctionnelles.

Un cas important pour le choix des techniques est celui des filières et des processus de production qui comportent des maillons intensifs en main d'oeuvre mais demandent en même temps le recours à des techniques de pointe. C'est pourquoi l'analyse fortement désagrégée des processus de production s'impose en tenant compte de la différence entre le progrès technique se traduisant par la nature et la qualité du produit et le progrès technique au niveau du processus de la production proprement dit. Les pays sous-développés doivent apprendre à gérer au mieux le pluralisme technologique³⁹.

Mentionnons enfin le progrès technique "pur" provenant de l'application des inventions ne demandant pas des investissements significatifs, comme c'est parfois le cas dans l'agriculture (certains progrès en matière de génétique) et plus généralement au progrès technique désincorporé (méthodes de gestion). Kalecki était très sensible à cette dimension⁴⁰. Il pensait par ailleurs que les pays disposant de cadres scientifiques de haut niveau, dont les rémunérations restaient très inférieures à celles des scientifiques des pays industrialisés, avaient une carte à jouer en matière de spécialisation en vue du commerce extérieur en proposant

³⁸ Cette thèse demande à être nuancée à la lumière de nos connaissances actuelles sur les conséquences écologiques de l'usage abusif d'intrants chimiques.

³⁹ Pour l'élaboration de ce concept, voir Sachs, I. et Vinaver, K., "Integration of Technology in Development Planning : a Normative View", in *Science and Technology for Development : Planning in the STPI Countries*, Ed. F.R. Sagasti ; and A. Araoz.- Ottawa : IDRC (International Development Research Center, cop. 1979, pp. 117-136). Le contrôle des opérations de commerce extérieur postulé par Kalecki excluait en principe le cas de figure observé aujourd'hui dans plusieurs pays où l'agriculture locale subit la concurrence déloyale des importations de denrées alimentaires, dont le prix est subventionné par le pays exportateur. Nous avons cependant signalé le risque de l'effet pervers des importations subventionnées des céréales dans notre analyse de l'aide nord-américaine (voir Kalecki, M. et Sachs, I., op.cit.).

⁴⁰ Il lui arrivait de demander aux étudiants en examen d'où venaient les inventions. La bonne réponse consistait à montrer la tête.

des produits intensifs en main d'oeuvre hautement qualifiée. Dès 1955, il a suggéré, sans avoir toutefois obtenu gain de cause, que la Pologne se lance dans la production d'ordinateurs en mettant à profit ses excellents mathématiciens et l'offre abondante et bon marché de main d'oeuvre féminine nécessaire à l'industrie électronique. Le succès que connaissent aujourd'hui les exportations du software indien montre qu'il avait vu juste.

Trente ans après

Kalecki n'a pas vécu pour assister à la revanche des monétaristes sur les keynesiens, à l'ascension foudroyante (au double sens du terme) de la contre-révolution néolibérale⁴¹ et à l'application *urbi et orbi* des politiques connues sous le nom de Consensus de Washington très différentes de celles qu'il aurait recommandées⁴².

Il est sans doute trop tôt pour parler de la fin de l'interlude néolibéral. Cependant, les récentes crises en Asie du Sud-Est, en Russie et au Brésil ont sérieusement ébranlé l'hégémonie des théories monétaristes et néolibérales et leur prestige auprès de la Banque Mondiale. Son économiste en chef, J. Stiglitz, parle de l'après-consensus de Washington⁴³. De son côté, John Gray montre que l'économie du laissez-faire n'a été qu'une courte aberration historique en Angleterre, d'ailleurs rendue possible par les interventions de l'Etat britannique. Gray trouve que le projet d'instaurer un laissez-faire global, entrepris par les Etats-Unis, ne peut mener qu'à une tragédie. La crise asiatique est à ses yeux la première démonstration historique des effets potentiellement désastreux pour la stabilité économique de la libre circulation des capitaux⁴⁴.

Dans un livre décapant, D. Rodrik se livre à une analyse économétrique destinée à montrer que les politiques d'ouverture ne mènent pas nécessairement à la croissance, loin s'en faut. Cette dernière dépend encore pour l'essentiel des taux d'investissement et de bonnes politiques macro-économiques. L'auteur invite les *policy-makers* à se méfier des modes changeantes dans la pensée économique et

⁴¹ C'est Hans Singer qui qualifie de cette façon la théologie néolibérale. Je pense que Kalecki l'aurait approuvée.

⁴² Le seul point en commun serait la préoccupation d'éviter l'inflation et l'érosion du pouvoir d'achat des salaires qu'elle entraîne.

⁴³ Voir Stiglitz, J. (1998), "More Instruments and Broader Goals : Moving Toward the Post-Washington Consensus" (UNU-WIDER, Helsinki) et "Towards a New Paradigm for Development : Strategies, Policies and Processes", Prebisch Lecture, UNCTAD, Geneva.

⁴⁴ Gray, John (1999), False Down - The Delusions of Global Capitalism, Granta Books, Londres.

de l'orthodoxie prônant l'Etat réduit et le laissez faire. *"Il n'y a pas de formule magique pour surmonter les défis de la croissance économique et s'il y en a une ce n'est pas l'ouverture"*⁴⁵. Pour lui, les politiques internationales doivent créer un espace pour les efforts nationaux de développement, forcément pluriels pour ce qui est de leur philosophie et contenu. Il est absurde de vouloir imposer à tous les pays un modèle unique de développement dont la supériorité est de surcroît douteuse. *"La leçon de l'histoire c'est qu'en dernière instance tous les pays qui réussissent développent leur propre version du capitalisme national"* (op.cit. p. 150). La structure des institutions sociales, le degré d'inégalités jugé tolérable, les espèces de biens publics que les gouvernements doivent fournir constituent autant de questions qui doivent être résolues au niveau national. On parle beaucoup des nouvelles formes de gouvernance rendues nécessaires par la révolution informationnelle et la mondialisation de la production. Mais nous ne savons pas encore quelle forme donner à cette gouvernance et comment l'instituer. Tout ce que nous avons pour le moment ce sont les gouvernements nationaux. *"Il ne serait pas sage de les abandonner sans savoir ce qui viendra à leur place. Un bon système international est celui qui permet la coexistence des différents styles de capitalisme national et non pas celui qui impose un modèle uniforme de gouvernance économique"* (op.cit. p. 152).

Difficile de dire mieux. Peut-être la meilleure façon de construire les politiques de l'après-consensus de Washington consiste à renouer avec la pensée économique des années 50 et 60. C'est dans ce contexte qu'apparaît l'actualité de la théorie du développement selon Kalecki.

Certains auteurs indiens l'ont bien vu en proposant que l'emploi et la répartition *ex ante* du revenu entre les rémunérations du travail et les profits soient utilisés comme points d'entrée dans le processus itératif conduisant à l'élaboration d'une stratégie, voire d'un plan de développement. Il s'agit ni plus ni moins que d'inverser la démarche qui traite l'emploi et la répartition du revenu comme résultantes du processus de croissance tiré par le marché⁴⁶. Les politiques d'emploi qu'il ne faut pas confondre avec la flexibilisation des marchés du travail doivent, une fois de plus, occuper une place tout à fait centrale dans les stratégies du développement.

⁴⁵ Rodrik, D. (1999), The New Global Economy and Developing Countries : Making Openness Work, ODC/John Hopkins University Press, Washington, p. 141.

⁴⁶ Voir à ce sujet le livre de Arun Gosh (1996), Paradigms of Economic Development, Indian Institute of Advanced Study, Simla et la recension qu'en a fait C.T. Kurien ("Development with Equity", Economic and Political Weekly, May 10, 1976, p. 1018. Nous avons déjà cité l'article de Sukhamoy Chakravarty lui-même auteur d'une importante analyse critique de l'expérience indienne de planification (Chakravarty, S. (1994), La planification du développement : l'expérience Indienne, Ed. de la Maison des Sciences de l'Homme, Paris).

Plus que jamais, l'emploi et l'auto-emploi constituent en effet une priorité absolue. Même dans les pays riches il n'est plus question de remédier à la situation en ayant uniquement recours à la **redistribution du revenu**. Le chômage structurel, la précarisation du travail et l'exclusion sociale qui s'ensuit sont aujourd'hui l'apanage commun des pays riches et des pays pauvres souffrant d'une dualisation de la société qui permet de parler de la *tiersmondisation* de la planète. C'est pourquoi le paradigme social-démocrate est entré en crise. L'effondrement du socialisme réel ne saurait être considéré comme une démonstration *a contrario* de ce modèle pas plus que du modèle social-libéral.

Nous devons nous attaquer à la **distribution primaire du revenu** inscrite dans les modes de production. Il y a un demi-siècle, un disciple de Gandhi écrivait déjà à ce sujet : *"notre problème est de créer de l'emploi pour 400 millions de personnes de façon à ce que chacun voit ses besoins primaires satisfaits. Cela veut dire que notre méthode de travail doit consister à répartir la richesse dans le processus de sa production. Lorsque la répartition et la production ne vont pas de pair et ne se font pas simultanément, cela conduit souvent à l'accumulation de la richesse d'un côté et celle de la pauvreté et de la misère de l'autre"*. Puis il ajoutait : *"la richesse d'un pays ne peut se mesurer au nombre de millionnaires que le pays possède"*⁴⁷.

Dans l'optique de la recherche d'une croissance tirée par l'emploi, inspirée par la pensée de Kalecki, la situation de nombreux pays du Sud permet un certain optimisme, ce qui peut à première vue surprendre. C'est qu'ils possèdent des gisements importants d'emplois qu'il devrait être possible d'actionner en faisant appel à la mobilisation des ressources réelles et financières⁴⁸ internes sans recourir à des capitaux étrangers et sans faire pression sur la balance commerciale du fait de leur contenu d'importations très limité. Cinq pistes nous paraissent particulièrement intéressantes :

1. L'essor de l'agriculture paysanne, stimulé par les réformes agraires, là où elles sont nécessaires, ainsi que par des programmes de modernisation des petites exploitations et, plus généralement par le développement rural intégré fondé sur la plurifonctionnalité croissante des unités familiales. Dans un rapport qui est passé presque inaperçu, la Commission Mondiale pour l'Alimentation et la Paix

⁴⁷ Kumarappa, J.C. (1949), The Gandhian Economy and Other Essays, Maganvadi, Wardha, p. 5.

⁴⁸ Soit, comme il en a déjà été question, en ponctionnant une partie des revenus des couches aisées, soit en élevant l'épargne au-delà du niveau initialement prévu, notamment sous forme d'investissements non monétaires des paysans et des citoyens participant à l'auto-construction assistée de logements.

parle d'un milliard d'emplois ruraux directs et indirects à l'échelle mondiale en extrapolant une étude indienne proposant la création de 100 millions d'emplois en dix ans ainsi distribués : 45 millions d'emplois agricoles proprement dits, 10 millions d'emplois dans les industries agro-alimentaires, 45 millions d'emplois ruraux et urbains dûs à l'effet multiplicateur de la consommation accrue des masses rurales, le secteur rural constituant à la fois une source de biomasse (aliments, fourrages, bioénergies, engrais verts et matières premières industrielles) et un débouché pour les produits industriels et les services⁴⁹.

2. Les emplois liés à l'éco-efficacité, au ménagement des ressources et à l'entretien des équipements, des infrastructures et du cadre bâti, se traduisant par la prolongation de leur durée de vie utile et donc par la réduction de la demande pour les investissements de reposition. En termes de Kalecki, il s'agit de réduire le coefficient a (le taux de dépréciation réelle) et d'augmenter u (le coefficient de meilleure utilisation de l'appareil de production) à travers la réutilisation des matériaux, le recyclage, l'économie de l'énergie, de l'eau et d'autres ressources naturelles, en d'autres mots d'actionner les sources de croissance ne demandant pas d'investissements. En termes macro-économiques, de nombreux emplois liés à l'éco-efficacité s'autofinancent par les économies en ressources naturelles qu'ils induisent. Nous rejoignons ici le postulat fondamental de l'écodéveloppement : la recherche de solutions triplement gagnantes au plan social, écologique et économique⁵⁰.

3. Les emplois et les auto-emplois liés à la construction et à l'auto-construction assistée des logements populaires dans les villes et dans les "pré-villes" (bidonvilles et quartiers périphériques) du tiers monde. Plus de 600 millions d'habitants y sont à présent dépourvus de logements décents. Or, l'urbanisation des réfugiés des campagnes suppose qu'ils aient un accès à des logements décents, à des emplois stables et des conditions d'exercice effectif de la citoyenneté.

4. Les travaux publics, essentiels pour la modernisation et l'essor des économies en voie de développement à un moment où elles doivent s'engager dans le

⁴⁹ International Commission on Peace and Food (présidée par M.S. Swaminathan), 1994, Uncommon Opportunities. An Agenda for Peace and Equitable Development, Zed Books, Londres, pp. 122-124. Voir aussi Abramovay, R. et Sachs, I. (1999), Nouvelles configurations villes-campagnes, UNESCO-MOST, Paris.

⁵⁰ Voir entre autres Sachs, I. (1993), L'écodéveloppement - Les stratégies de l'écodéveloppement au XXI^e siècle, Syros ; Von Weizsäcker, E., Lovins, E.B., Lovins, L.H., 1997, Factor Four - Doubling Wealth, Halving Resource Use, The New Report to The Club of Rome, Earthscan, Londres ; Sachs, W., Loske, R., Linz, M., 1998, Greening the North - A Post-Industrial Blueprint for Ecology and Equity, Zed Books, Londres et New York ; Ayres, R.U., 1998, Turning Point, Earthscan, Londres.

rétablissement de leur capacité interne d'investissement et enclencher le cercle vertueux keynesien d'investissement-épargne⁵¹. D'autant plus que la compétitivité systémique dépendra pour une large part des progrès enregistrés en matière de réhabilitation et expansion des infrastructures.

S'agissant des biens appartenant à la catégorie de *non-tradables*, les marges de liberté pour choisir des techniques plus créatrices d'emplois existent, mais sont rarement mises à profit. Il ne s'agit pas d'aller partout à l'extrême des travaux réalisés la pelle à la main, pas plus que d'importer les équipements les plus performants et fortement automatisés, dont l'utilité peut être questionnée même dans les pays les plus riches.

5. Enfin, il convient de mentionner les services et tout particulièrement les services sociaux dans l'acception la plus large de ce terme. La demande pour ces derniers est loin d'être satisfaite même dans les pays les plus riches si l'on se situe dans l'optique des besoins et non dans celle de la demande solvable. Les pays où le niveau des salaires reste bas produisent ces services à un coût absolu très inférieur à celui des pays aux salaires élevés. C'est peut-être leur chance pour avancer dans la direction d'un Etat protecteur sans attendre que leurs revenus par tête arrivent à des niveaux comparables à ceux des pays industrialisés⁵². D'autant plus que l'émergence du tiers secteur (la société civile organisée) ouvre un champ à des expérimentations en matière de nouvelles formes de partenariat entre les trois secteurs public, privé et associatif.

En dérogeant à sa modestie habituelle, dans une préface à la réédition de ses écrits de jeunesse datée de 1964, Kalecki s'est dit convaincu d'avoir posé et résolu un certain nombre de problèmes qui ont par la suite absorbé l'attention des économistes pendant deux décennies⁵³. *Mutatis mutandis*, trente ans après sa disparition ce jugement s'applique à sa théorie du développement. A cela près que, pendant les deux dernières décennies, le courant dominant dans la pensée économique a préféré ignorer ses enseignements.

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⁵¹ Voir à ce sujet l'article déjà cité de J.A. Ocampo.

⁵² Voir à ce sujet Sachs, I., "Welfare States in Poor Countries", Economic and Political Weekly, vol. VI n° 3/4, janvier 1971, pp. 367-370.

⁵³ Kalecki, M. (1962), Prace z Teorii Koniunktury 1933-1939, Panstwowe Wydawnictwo Naokowe, Varsovie, p.7.

ECONOMIC CRISES IN LATIN AMERICA.

SOME CONSIDERATIONS IN THE LIGHT OF M. KALECKI'S THEORY

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Since the demise of their high-growth period, which lasted from the fifties through the beginning of the eighties, Latin American economies have seen their long-run average growth rate decline. Simultaneously, they have been subject to several and in some cases dramatic foreign exchange crises. The crises and subsequent recoveries are very idiosyncratic. Still, there seems to be a certain typical pattern amongst Latin American semi-industrialized economies², which allows for some generalizations.

The objective of this paper is to analyze Latin America's crises and recoveries (economic cycles, for short) within a broad perspective, and particularly to consider these episodes in the light Michal Kalecki's theory of

¹ The author is grateful to Malcolm Sawyer for his detailed comments. The usual disclaimer applies.

² I refer to Argentina, Brazil, Chile, Colombia, Mexico, Uruguay and Venezuela.

effective demand in capitalist economies. The paper can thus be read from two different angles. It can be read as an analysis of Latin American economic cycles, with the help of M. Kalecki's theory. It can also be read as a present-day reflection on certain aspects of Kalecki's theory of the capitalist economy, illustrated with particular episodes of Latin American economies.

The paper is organized as follows. In the first section I describe the course of a representative economic cycle in Latin America. In the second section, I discuss some analytical issues involved. I initially consider the role of investment and compare the typical Latin American cycle with Kalecki's and Keynes's theory of business cycles. Secondly, I look at the economic policy measures implemented to cope with the crisis. In this context I first analyze currency depreciation, then I reflect upon credit contraction, and lastly I deal with governmental expenditure and its deficit. In the final section I summarize the main findings of the paper.

Perhaps a warning is in order before getting into the matter. In attempting to generalize on the basis of particular experiences of countries that differ in many respects, one runs many risks. I am conscious of these risks.

I think my generalizations are quite accurate with respect to Mexico, a country I have been able to study in depth. But I would concede, if proof were bestowed, that some of my statements may be less valid for other countries, where I have only second-hand knowledge³.

I

The Course of the Crisis and Recovery

I shall first give a concise account of what seems to be the stylized course of a typical economic cycle in Latin American semi-industrialized economies (Latin American economies for short). The following common features stand out:

- a) The crisis usually follows an extended period of current account deficit (which may be accompanied with capital flight). The accumulation of a current account deficit brings about a high degree of fragility to shocks to the economy.
- b) The crisis is triggered by an external shock that brings about the collapse of the value of the domestic currency. The shock in question is usually a deterioration of the foreign terms of exchange, or a

³ I provide statistical support for most of my statements for Mexico in López (1998).

- drastic fall of exports, or a worsening of the conditions of access to foreign credit.
- c) The onset of the crisis comes with the downfall of private expenditure --i.e. private fixed investment and private consumption. The drop of the latter is due to the decline of employment, but most of all results from a large decline of real wages.
- d) The fall of investment takes place abruptly and without any previous signs that investment incentives are faltering. All components of private investment --i.e. fixed investment and stocks, residential construction and machinery and equipment-- decline, and their fall explains a large percentage of the drop in final demand and output.
- e) Government expenditure, and especially government investment, also falls at the onset of the crisis, greatly contributing to the decline of aggregate demand.
- f) The balance of trade improves. One reason is the expansion of exports, which tends to be the higher, the larger the share of manufacturing exports in total exports. But the contraction of imports and especially imports of investment goods and industrial

inputs explain most of the improvement in the trade balance. In fact, total imports fall at a higher rate than output --i.e. the coefficient of import declines. But this is not the consequence of import substitution ensuing from a change in relative prices between domestic and foreign goods. Rather, the decline is mostly explained by the higher-than-average import content of investment demand.

- g) Real wages drop, and a shift from wages takes place. Notwithstanding the fall in wages, inflation tends to accelerate due to the higher domestic prices of imports. On the other hand, the rate of open unemployment jumps, though not necessarily much --but then mostly because open unemployment is usually very low since no unemployment insurance exists in Latin American countries.
- h) The crisis may be drawn out, and a necessary -- though not sufficient-- condition for the recovery to take place is a positive external shock, which is usually a rise in the price of export commodities. In the more recent experiences, such as Mexico's, Argentina's and Brazil's, an important aid package has been indispensable in order to avoid a huge and

prolonged crisis.

- i) Just as the decline of demand and output in the course of the downswing is mitigated thanks to the growth of exports, the latter is normally the single most important factor contributing to the recovery, with both manufacturing and non-manufacturing exports growing. Imports recover, and at the upper point of the recovery they may actually exceed their pre-crisis level. In any event, the trade balance improves, dragging with it demand and output.
- j) Government expenditure also grows at the onset of the recovery. The fiscal accounts are normally -- and especially during the most recent period-- kept in balance. This is the consequence of the conditions imposed upon these countries by international financial institutions; but it is also the result of the new wisdom prevailing amongst policymakers in Latin America.
- k) Once the recovery is underway private expenditure starts growing and replaces exports and the government expenditure as leading demand factor in the upswing. However, private expenditure may not fully recover from its decline during the downswing.

In fact, both consumption and fixed investment may be lower at the upper point of the recovery than they had been prior to the crisis.

- l) The economic recovery, though it may be strong, is normally also lopsided, and the working classes hardly benefit. Although employment is after a time restored to its pre-crisis level, average real wages do not recover until after quite a long time.
- m) When the recovery is completed and output is back to its pre-crisis size, investment may still be below its former level. However, domestic savings, and especially private savings, usually are higher, and the share of private savings in output is well above its pre-crisis level.

With this background description of the course of the typical Latin American economic cycle in mind, I turn next to some analytical issues involved.

II

Some Analytical Issues

1. - Private investment and the cycle.

I will analyze Latin American crisis experiences in the context of business cycle theories. I will take Kalecki's theory of business cycle as a starting point because, besides

its intrinsic importance, it inaugurated the theoretical development of, and thus also represents a whole class of business cycle models. In this class of models the cycle is entirely endogenous, and its course is governed by the course of private investment⁴.

Summarizing to the utmost Kalecki's model, private investment follows with a lag investment decisions, which are dependent (amongst other factors) upon the rate of profit. Thus, the turning points of the cycle follow, after a lag, changes in the economic conditions, and in fact follow to a large extent the turning points of the rate of profit. Moreover, investment decisions are essentially irrevocable. That is, events occurring between the moment the decision was taken and its implementation do not normally lead to their cancellation or even revision.

Kalecki also introduced external shocks into his model (1954, chapter 13). But these were not of the kind that could derail the "normal" course of the cycle, in the sense that they do not determine its turning points. Thus, although he

⁴ One cannot lose sight of the fact that Kalecki (1943) had also another political, and accordingly much less mechanistic, theory of economic cycles. In this paper I do not refer to Kalecki's political cycle.

recognized that particular situations might lead to the cancellation of investment orders (1954; 201, footnote 49), he did not consider this phenomenon in depth.

In order to understand the reason for these simplifications in may be useful, I think, to take into account Kalecki's theoretical objective. As I have argued elsewhere (López and Mott 1999), Kalecki's objective was very broad indeed. In fact, his theory of effective demand and of investment was just a stepping-stone into a much grander purpose -- to develop a theory of the overall dynamics of a capitalist economy. A theory, that is, adequate to explain why long-run growth goes hand in hand with cyclical movements around the trend. Thus, his theory was not meant to analyze particular episodes; and he left out of the picture those atypical periods when "disorder", rather than "conditional stability" characterizes the economic record (to use the very apt distinction established by Crotty (1994, 117)). Indeed, at a very early stage of the elaboration of his theory, Kalecki (1933a) recognized that his model would not remain valid under shocks capable of provoking a "crisis of confidence".

It is worthwhile in this context to contrast Kalecki's cycle theory with Keynes's. In a comparison between our two

authors, Keynes's business cycle theory, as expounded in Chapter 22 of the General Theory, appears at first sight much more vague and less structured than Kalecki's. In the first place, the turning points of the cycle occur because long-run expectations change wildly without previous notice, and without there being a unique kind of endogenous development causing that change. In the second place, the regularity of fluctuations --which is necessary in order to characterize fluctuations as cycles-- does not appear to be demonstrated, mostly because an explanation of the regularity of fluctuations necessitates a mathematical model⁵.

It was probably this rather loose nature of Keynes's reasoning that led Joan Robinson (1980 [1964], p. 95) to say, "Keynes was very weak [on the theory of the trade cycle]". However, it may be argued that her stricture is unjust,

⁵ Moreover, Keynes (1964, 314) was of the opinion that "the substitution of a downward for an upward tendency often takes place suddenly and violently, whereas there is, as a rule, not such a sharp turning-point when an upward is substituted for a downward tendency".

insofar as Keynes's theoretical objective and his approach to business cycle theory were very different from Kalecki's⁶.

In fact, it may be claimed that Keynes did not see the necessity, or perhaps even the possibility, of developing a long-run theory of capitalist development. His was a very short-run theory because the medium and long run could not be analyzed with a firm basis. This was due in part to investment being mostly dependent on psychological factors, such as "animal spirits," expectations and conventions. Thus, because the turning points result from abrupt changes in expectations, which almost by definition cannot be regular, his was a theory of economic fluctuations, rather than a proper business cycle theory.

Now, most of Latin American economic cycles take place exactly in those atypical periods of disorder rather than conditional stability mentioned above. Besides, they tend to closely conform to the pattern of "financial crises" caused by an exogenous shock, which Keynes (1936, chapter 22) did analyze, and about which one of his most eminent followers extensively theorized (Minsky 1975, 1982, 1986).

⁶ What follows owes a great deal to Carvalho's (1988) stimulating paper.

We have already depicted the course of a Latin American representative crisis. As stated, the collapse of private investment, which is normally the most weighty factor triggering the crisis, is not usually caused by a prior downfall of the rate of profit, but rather follows instantaneously a shock that causes a sudden change of expectations. Expectations are further deteriorated after the announcement by the economic authorities that government expenditure will be curtailed and credit will be reduced. It appears that frequently many previous investment decisions and orders are canceled, thus leading to the abrupt and violent fall of actual investment. Thus, the building-up of a high degree of fragility is an endogenous development of the previous development path of the economy, and a high degree of fragility is a pre-condition for the crisis to take place. But the triggering factor is normally an exogenous shock.

The recovery from the common Latin American crisis does not either follow the typical pattern of business cycle upswings, in the sense that it is not usually triggered by a revival of private investment, following the restoration of the rate of profit. But neither does it come about solely as

a result of an improvement of (long-run) expectations⁷ -- although an improvement of expectations is a necessary condition for the recovery of private investment. Rather, it is almost invariably initiated by the improvement in the trade balance, and also by the increase in government expenditure. Both raise profits and stimulate private investment.

Once initiated, the recovery develops very much in line with Kalecki's theory. Higher profits stimulate private investment, employment, wages and private consumption. Thus, at a certain stage private expenditure replaces exports and government expenditure as the leading demand factor in the recovery. Higher domestic demand brings about a rise in imports, and may abate the rise of exports, especially if exports of basic goods weight heavily in total exports, as in Argentina for example. The trade surplus diminishes which directly or indirectly tends to dampen the economic upswing. The upswing loses momentum much earlier than full utilization of the productive capacities has been reached.

⁷ For example, not even the huge aid package given to Mexico after the December 1994 crisis could improve expectations enough to stimulate private investment, which did not lead but rather followed the recovery in 1995.

We shall now analyze more in depth the points briefly sketched above, in the context of an inquiry into the typical economic strategy response with which the authorities tend to confront the crises.

2. - Economic Policy in the Crisis and the Recovery

When confronted with a crisis, Latin American economic authorities have usually responded with the following set of measures:

- (a) Freeing of the exchange rate.
- (b) Reduction in bank credit.
- (c) Contraction of public expenditure.

In the typical adjustment package, it seems to be implicitly assumed that the crisis is always the final outcome of a previous expansion beyond the productive potential of the economy, and that the contraction in external credit will further reduce the supply capacities. Then, the Central Bank's withdrawal from the foreign exchange market unleashes a currency depreciation. The currency depreciation would eventually reduce the external deficit to its equilibrium level. It would also stimulate aggregate demand, because exports would grow even as import substitution would be stimulated.

Since the domestic supply is assumed to be at its

potential level and imports are assumed to be greater than those that could be financed, inflationary pressures would be kept high. In order to cope with them, and also to help redress the external sector, it is necessary to contract aggregate demand by reducing credit to the private sector and government expenditure⁸ (and simultaneously putting a cap on the growth of money wages).

The main results achieved with this set of economic policy measures have been briefly sketched in the preceding section. Although the external imbalance is corrected and the country is soon able to regain access to the international capital markets, output, real wages and investment all fall, sometimes dramatically. Finally, inflation will accelerate unless the fall of real wages is indeed huge.

These results normally come as a surprise to the authorities and to the international financial agencies involved in the adjustment package. However, they should not surprise anybody. In fact, the collapse of the economy during

⁸ There is an ambiguity here. At a theoretical level, it is assumed that government expenditure does not affect aggregate demand, since it only crowds out private expenditure. However, at a practical level, policy makers acknowledge that government expenditure does expand demand.

the downswing closely follows Kalecki's theory of effective demand. The drop of private investment reduces effective demand, profits and the profit rate, thus further discouraging new investment (and also aggravating the financial crisis and setting off a wave of bankruptcies). Furthermore, the reduction of real wages does not improve profits or stimulate investment decisions. Rather, it intensifies the drop of consumption and aggregate demand.

The fall of private demand is magnified when, as is normally the case, government expenditure is also curtailed. Finally, the course of the crisis is normally mitigated thanks to the improvement in the trade balance, which sustains private profits and effective demand (Kalecki, 1933b). The improvement in the trade balance, and the shift to profits, bring about an expansion of domestic, and especially private savings, and a rise in the share of private savings in output⁹.

⁹ Many econometric studies, utilizing increasingly sophisticated time-series techniques, have been devoted to analyzing whether investment causes saving, or the other way around. The matter does not seem to deserve such an effort, for private gross domestic saving is **always, in each and every period of time**, equal to gross private investment, plus

We shall now elaborate on the economic policy issues involved in the management of the crisis, and we shall contrast the conventional adjustment package with Kalecki's theory.

a. - Currency depreciation and domestic demand.

As mentioned, freeing of the exchange rate is an important component of the typical adjustment package. Government authorities, as well as international financial institutions, seem to be of the opinion that currency depreciation ensuing from the freeing of the exchange rate is indispensable in order to diminish the depth of the crisis and to stimulate the recovery. This is based on the expenditure-shifting effect of currency depreciation; that is, it invigorates exports even as it brings about a decline of the coefficient of imports. It is alleged that the trade balance will improve with the currency depreciation, dragging with it demand and output.

Kalecki, on the contrary, was very skeptic about the alleged beneficial effects of currency depreciation. Unlike Keynes, he did not accept the theory of diminishing marginal returns or (its corollary under perfect competition) that

the export surplus, plus the budget deficit. See Kalecki (1939b, 243-4; and 1954, 243-4).

real wages passively adapt to the level of output and employment. Hence, he thought that money and real wages could actually fall with unemployment.

We can easily understand the importance of the analyzing the effect of currency depreciation for Kalecki's theory of capitalism (and, more in general, for the theory of effective demand). Kalecki (1939a: 38) noted that "a reduction of wages in an open system is very much the same as that of a currency depreciation"¹⁰. Now, if the fall in money and real wages and the consequent depreciation of the currency (and improved competitiveness) do bring about an expansion of employment and output, capitalist economies would have a built-in full employment mechanism. Unemployment would bring about a reduction of wages, which would result in a currency depreciation, and the latter would stimulate affective demand and thus the re-absorption of unemployment. In fact, the previously described mechanism might be even stronger than e.g. the so-called "Pigou-effect", which Kalecki so

¹⁰ **Grosso modo** a **nominal** currency depreciation is equivalent to a fall in money wages with a constant nominal exchange rate; while a **real** currency depreciation (i.e. a depreciation capable of improving price competitiveness) necessitates a fall of real wages.

thoroughly demolished, and which the theory of effective demand has never accepted.

From his analysis Kalecki concluded: "even in such a case [in an open system, J.L.] the reduction of wages does not necessarily lead to an increase in employment, and the prospects of raising the aggregate real income of the working class are even dimmer. In particular, under the system of high and rising tariffs it is very likely that a reduction of wages will have an adverse effect on employment also in an open economy " (Kalecki 1939a: 38)¹¹. His analysis is rather laconic, but we can elaborate on it, and rigorously examine the effects of currency depreciation with the help of his theory.

Consider the following equations, where P stands for profits, I for private investment, C_k for capitalist consumption, X for exports, M for imports and B is the budget deficit. On the other hand w is the relative share of wages in the value added (or output), so that (under simplifying assumptions) $1-w$ is the share of profits in output; k is the "degree of monopoly", or the ratio of aggregate proceeds to

¹¹ In their otherwise excellent paper, Krugman and Taylor (1978) do not mention Kalecki as one precursor of the theory of the contractionary devaluation.

aggregate prime costs, which is also equal to the ratio of average prices to average prime costs; and j is the aggregate cost of materials to the wage bill. Next, p is the price charged by a firm, u is the unit prime cost, p' is the weighted average price of all firms, and m and n are parameters. Finally, z is the real exchange rate, p^i is the index of domestic prices, p^* is the price index of our trade partners, and E is the nominal exchange rate (say pesos per dollar) of international prices. We posit:

$$P = I + C_k + X - M + B \quad (1)$$

$$Y = P / (1-w) \quad (2)$$

$$w = 1 / [1 + (k-1)(j+1)] \quad (3)$$

$$p = mu + np' \quad (4)$$

$$p/u = m + n(p'/p) \quad (4a)$$

$$z \equiv E(p^*/p^i) \quad (5)$$

Equation (1) is the well-known Kalecki equation for profits in the open economy. Equation (2) makes output depend on profits and the share of wages (and hence of profits) in output. Equation (3) shows that the relative share of wages in the value added is determined by the degree of monopoly and by the ratio of the materials bill to the wage bill. Equation (4) depicts the pricing policy of firms, which fix prices taking into consideration their average prime cost and

the prices of other firms producing similar products (more on this later). Finally, equation (5) defines the real exchange rate.

Consider now the effects of a currency depreciation that leads to a rise in the real exchange rate. In the short run, when capitalists' expenditure is given, the effect of the depreciation on profits will depend on the elasticity of exports and imports with respect to the real exchange rate. That elasticity is probably higher today than in Kalecki's times, because nowadays trade is much less restricted --in other words, the so-called "Marshall-Lerner condition" is probably fulfilled¹². Still, it is well known that the response of exports (and import substitution) to the change in relative prices may be slow, and that in the short-term the currency depreciation may result in a worsening of the balance of trade and in profits. The latter may be further reduced if private investment does fall in the short term.

¹² However, if export firms do not reduce by much their international prices in foreign currency (because they price to the circumstances of the market in which they are selling rather than to their costs), then export demand is unaffected and everything depends on the price-elasticity of imports. I owe this observation to Malcolm Sawyer.

This may in fact come about as a result of worsening expectations and of the increase in the indebtedness ratio of firms indebted in foreign currency, ensuing from currency depreciation (Kalecki did not consider the latter possibility, probably because it was unimportant in his times).

This is not the end of the story, for besides total profits, the relative share of wages in output too is likely to fall with a currency depreciation, magnifying the drop of demand and output (see equations 1 and 2). Indeed, the currency depreciation brings about, in the first place, a rise in the ratio of the materials bill to the wage bill (j), and in the second place an increase the price of competitive imports, which probably will stimulate a rise in the degree of monopoly (k)¹³.

¹³ Firms catering to the domestic market may actually respond differently to a currency depreciation than firms catering to the export market. In both cases the "degree of monopoly" may rise, but more so in firms catering to the export market because their price in foreign currency will fall by little, if at all, in spite of the fall in their costs in foreign currency.

Summing up, in Kalecki's theory several factors may produce a contraction of output as a result of currency depreciation, and this fall may take place even if the Marshall-Lerner condition is fulfilled. Moreover, the contraction of output and employment may be drawn-out, due to the detrimental effects of the fall of profits and of the decline in the degree of utilization of capacities on investment decisions and on investment.

All in all, it appears that the Latin American experience is closer to Kalecki's than to the conventional anticipation. As mentioned previously, currency depreciations have usually been followed by declines in aggregate demand and in output¹⁴. Of course, the poorest sections of the population are hit harder by the fall in output and in

¹⁴ There is ample evidence for Mexico about the negative influence of currency depreciation on demand and output; see López 1998 and the references given therein. Summarizing the results of the series of country studies (including Argentina, Brazil, Colombia, Chile and Mexico) he directed for WIDER, Taylor (1988:43) concluded "...the contemporary consensus in the WIDER...macro studies is that devaluation causes short-run stagflation; inflation and output contraction at the same time".

employment. But the economic downswing also deteriorates the standard of living of the medium, and even the higher-income groups may be harmed if profits fall.

b. - Financial conditions in the crisis.

It is generally accepted that the financial aspects of capitalism are relatively undeveloped in Kalecki's theory and empirical analyses. However, he had very definite views concerning the effects of monetary policy and financial conditions.

Kalecki argued that, provided the economy was not pushed beyond full employment, even a large budget deficit need not raise the rate of interest. But to avoid the rate of interest from rising the central bank should provide the requisite bank reserves. In his view, then, monetary policy was required as a complement, but by itself its power was rather limited. Let us consider in more detail Kalecki's perspective on the subject.

On the basis of his "principle of increasing risk", Kalecki (1937b) thought credit rationing was a permanent feature of capitalist economies. Only firms with capital and profits of a minimum size would be willing to demand and able to obtain external savings to complement their own internal accumulation of capital, and the rate of interest charged to

them could vary with the size of borrowing in relation to their own capital. Now, in his business cycle model the ratio of "internal" accumulation of capital to total investment is assumed to be constant¹⁵. The latter implies that the degree of credit rationing would not vary in the course of the cycle. That is, lack of external saving would not further depress private investment in the downswing, and a higher elasticity of credit supply would not either stimulate additional investment decisions in the course of the upswing¹⁶.

Thus the interest rate is the only variable pertaining to the realm of finance entering his analysis of the cycle. In his business cycle model he abstracted from the influence of the rate of interest, on the grounds that the rate of interest did not show cyclical fluctuations in the long run. But more in general he thought that the rate of interest had a small influence on private spending. It may be useful to reproduce one of his more clear-cut statements in full:

¹⁵ An exception is in Kalecki (1942). But the reasons and the consequences of varying this ratio receive only a cursory treatment.

¹⁶ Notice the difference with a Minsky-type cycle model.

"The fall in the rate of interest would probably tend to stimulate consumption mainly through inflating capital values of the existing assets. This effect would be significant, most probably, only if the fall in the rate of interest were considerable.. Even when effective, this [an open market policy to reduce the rate of interest --JL] seems to me the wrong way, from the social point of view, to increase employment because the method boils down to the stimulation of capitalist consumption¹⁷.

The reduction of the long-term rate of interest would stimulate investment by increasing its net profitability. Here again a substantial fall in the rate of interest is necessary in order to make the effect significant"¹⁸ (Kalecki 1946:403).

¹⁷ In Kalecki (1939: 262-3) he had provided some empirical evidence to substantiate his view that capitalist consumption is relatively inelastic with respect to the interest rate. Recall, in this context, that in Kalecki's model, and perhaps in his times, workers did not save or dissave.

¹⁸ Since he did not deal with periods characterized by "crisis of confidence" Kalecki left out those cases "when during the depression, the rate of interest rises" (1933:74).

Now, one of the most outstanding changes in capitalist economies since Kalecki's time is the deepening of financial relationships. Today, the relative share of financial assets and liabilities in the balance sheet of both firms and individuals (capitalists, rentiers **and workers**) is much larger than in the past --a phenomenon Hyman Minsky aptly labeled "financial fragility". This situation brings about an increased sensibility of demand towards developments in the financial markets --both domestic and international.

Latin American economies have also followed this tendency. As a result, typical Latin American crises depart considerably from Kalecki's model in that increases in the interest rates and drastic reductions in bank credit play a large role and exert a huge influence in the downswing. In fact, immediately after the onset of the crisis the central bank usually announces that domestic credit in real terms will be reduced, and that the monetary policy in general will be very stiff.

The announcement and implementation of an inflexible monetary policy, by itself, would lead to a curtailment of credit and to a rise in interest rates. But this basic tendency is magnified because banks' lending capacity and expectations worsen due to the deterioration of their balance

sheets ensuing from the rise of non-performing loans caused by the crisis, and from the increase in the service of their debt contracted in foreign currency.

Thus interest rates skyrocket and credit rationing occurs on an enlarged scale, which not only depress demand, by contracting fixed investment and consumption, but also decrease aggregate supply, further intensifying the decline in demand.

A rise in interest rates and curtailment of credit affect both investment and consumption demand. Normally, large firms are not much impaired because they have on-going credit lines with banks and, in any case, they can have access to foreign credit --particularly when, as is increasingly the case in Latin America, they are branches of or have long-term agreements with multinational concerns. But the higher price and lower availability of credit hit medium- and especially small-sized firms drastically. They are thus forced to curtail fixed and inventory investment, and the latter in turn impairs supply capacities in the short term, as will be argued shortly.

The higher price and lower availability of credit also affect consumption. Consumption of the higher-income brackets is not particularly reduced but mass consumption is severely

harmed because --unlike in Kalecki's times and model-- wage earners in today's Latin America do have access to credit. Thus, the workers' saving rate is forced upwards and the workers' consumption rate is reduced during the downswing, which further depresses demand and profits.

Because demand falls so drastically in the crisis that there seems to be little room for supply to play a role, an analysis of supply conditions is sometimes overlooked. This lack of interest may be valid for a closed economy, where supply accommodates demand (below full employment). However, supply conditions do have an importance in an open economy, and particularly so when a crisis, rather than a simple business downswing, takes place, because in a crisis demand is also affected. For example, if supply conditions deteriorate during a crisis, exports, and substitution of imports, will be lower than they might have been¹⁹. The trade balance will thus improve less than otherwise, and the drop in final demand and in output will be consequently larger, owing not only to the smaller trade balance, but also to the smaller internal demand induced by the smaller trade balance.

¹⁹ Recall that price and income elasticities of exports and imports depend on elasticity of demand and on elasticity of supply.

The worsening of the supply conditions of firms in the typical Latin American crisis can be explained as follows. In the first place, the rise in real interest rates deteriorates firms's equity position due to the higher service on debt. A second factor is credit restriction, because many small and medium-sized firms are credit-rationed. Last, but not least, production risks become higher. Thus, managers facing either productive or financial investments are likely to opt for the latter because these become relatively more profitable and less risky.

The deterioration of the supply conditions brings about a leftward shift of the supply function, which also provokes a leftward shift of the demand function. This is a consequence of the reduction in output, and the ensuing fall in employment, wages, and the demand for intermediate and wage goods.

Thus, due to credit restriction, during the crisis firms are not able to take advantage of the competitive gains brought about by the currency depreciation. Normally exports are not much affected, because large and financially solid firms are the main exporters. But firms producing for the domestic market, which are usually smaller and financially weaker than firms catering to the world market, are greatly

affected by the contraction of and by the rise in the price of credit. Probably the latter goes a long way in explaining a phenomenon that seems to be quite common in the typical Latin American economic cycle. Namely, the fact that the coefficient of imports is reduced very little, if at all, in the upper point of the recovery as compared to its value before the crisis, in spite of the phenomenal rise of the real exchange rate and in competitiveness of domestic producers.

c. - Government expenditure and the recovery.

We mentioned above that in the typical Latin American cycle, export growth is usually one of the triggers for recovery. We also emphasized that the improvement of the trade balance, by itself, would not be sufficient to spearhead the recovery. This is because during the downswing private investment and government expenditure fall, even while the multiplier of autonomous expenditure declines due to the drop of the share of wages in output (see equations 1 and 2) and the rise in the rate of saving. We suggested, finally, that together with exports, government expenditure is usually one of the triggers for recovery. In fact, we can posit that the recovery would not take place without the joint expansion of both exports and government expenditure.

The improvement in the trade balance and the fall in the utilization of the productive capacities and in employment caused by the downswing, leave ample room for expansionary fiscal policies. On the other hand, the worsening of the economic situation heightens public criticism of the authorities and brings with it political pressures on the government in order to do something. Finally, government accounts improve and the government is able to expand expenditure without incurring in deficit. I turn now to an analysis of the economic factors involved.

A large relative share of export taxes in total government revenues is one important characteristic of Latin American economies. Thus, government expenditure and exports are peculiarly intertwined in Latin America, in a relationship that helps in transmitting the export cycle into the domestic economy in a very distinct way. In this context I think outlining the Kalecki theory of fiscal policy may be useful as a previous step in understanding the general processes entailed.

At a very early stage of the development of his theory, Kalecki (1932, 1933b) emphasized the influence of government expenditure on effective demand. More particularly, he showed that deficit financing would have a strong expansionary

effect, and would add to private profits. Somewhat later he added that financing expenditure with taxes exacted on the private sector would also have an expansionary effect, provided those taxes were levied on business profits and firms did not pass on those higher taxes via higher prices (Kalecki, 1937a, Mott and Slattery, 1994)²⁰.

Referring now to Latin American economic cycles, the effect of government expenditure in spearheading the upswing is usually not given much credit, insofar as --at least during the last decade-- governments have in general avoided incurring in deficits. However, we know from Kalecki's theory

²⁰ Kalecki also devised a very novel and detailed methodology for analyzing the role of government demand on the cycle, which he applied in his studies on the US economy (Kalecki, 1956, 1962). During the fifties he directed a small team of economists at the Polish Academy of Sciences, devoted to the study of the economic situation in capitalist countries, which published a series of booklets on the subject (see e.g., Kalecki and Szeworski, 1957; Dobrska and Szeworski, 1958 and 1959; Dobrska, Kalecki et. al. 1960. See also Szeworski 1965). It is unfortunate that Kalecki had almost no following regarding his empirical studies of capitalist economies.

sketched above that even when the budget is balanced government expenditure can have an expansionary effect. We shall contend now that in most Latin American recoveries, and especially when the latter come as a result of a rise in exports, that expansionary effect may be quite large.

Consider first those economies where one important export industry is government owned, such as in Colombia, Mexico and Venezuela (the oil industry), and in Chile (the copper industry). In these cases, when the price of exports recovers government revenues swell and the government can expand expenditure without incurring in a budget deficit. However, the expansionary effect on aggregate demand of the government expenditure thus financed is as high as in the case of a deficit, because the government is spending more without levying higher taxes from the private sector²¹.

When the main export industry is not government owned the process is somewhat altered, but not drastically. In fact, in this case the rise in exports brings about a rise in profits and wages. The additional government revenue does not either involve a reduction in private earnings, nor does it

²¹ When both the price and the volume of exports rise, the expansionary effect is magnified because higher wages entail higher workers- consumption.

stimulate a rise in domestic prices, which could reduce the purchasing power of the population (as might be the case if the government raised taxes levied on producers catering to the domestic market). In this sense, its expansionary effects are again much like a budget deficit.

In conclusion, the role of government expenditure in spearheading the recovery after the typical Latin American crisis should be given due credit. All in all, the recovery is normally not the outgrowth of judicious economic policies that correct previous distortions, or the spontaneous consequence of the working of market forces set free from their previous constraints after the crisis completed its process of creative destruction. The recovery appears to be usually the final upshot of the interplay of economic and political factors. These factors can come into force thanks to a positive external shock that creates the material possibility of implementing expansionary policies, and thanks also to the political pressure on the government to go somewhat beyond the orthodox recipe.

III

Final Remarks

I will now summarize the main arguments developed in this paper.

1. - In Latin America's typical economic crisis the immediate and most significant trigger is usually the fall in private investment. This fall cannot be attributed to a previous decline in the rate of profit, but rather to the worsening of expectations ensuing from the collapse of the domestic currency, and also to the credit squeeze. The fall of government expenditure, the result of a restrictive fiscal policy, also contributes to the crisis. Manufacturing exports respond swiftly to the currency depreciation. Imports fall mostly due to the contraction of output, and import substitution practically does not take place, because the supply conditions of firms deteriorate due to the credit restriction. Firms catering to the domestic market are thus hampered from taking full advantage of their higher competitiveness, even as they suffer the contraction of their market. The improvement of the trade balance offsets the fall of domestic demand, but much less than it would if import substitution on a larger scale were to take place. The fall of the autonomous components of demand causes a decline of consumption. The latter decline is magnified due to the decline of real wages, and the shift to profits, ensuing from the currency depreciation. Thus the fall of real wages does not restrain the depth of the crisis, but rather tends to

intensify it. Consumption is also hampered due to the rise in the saving rate of the population ensuing from the lower availability and higher price of credit.

2. - Growth of exports is an important factor spearheading the recovery. Growth of government expenditure, and particularly the increase in the government expenditure financed with export taxes, appears to be usually another important trigger of the recovery. Since government expenditure financed with revenues accruing from exports does not encroach upon the purchasing power of the population, it has an important expansionary effect and can make a proportionally large contribution to increases in domestic demand, even as the fiscal and the external balance are kept in check. Imports rebound in the recovery, and the coefficient of imports falls little, if at all, compared to its pre-crisis level. Accordingly, the export surplus is below the level it would have reached if substitution of imports had taken place, thus restraining the recovery. The restoration of profits ensuing from the correction of the trade deficit, the enlargement of government expenditure financed with taxes on exports, and the (usually milder) recovery of private investment, lead to an improvement in business supply conditions.

3. - Though private expenditure recovers, it does not necessarily reach its level prior to the crisis. In fact, both consumption and investment may be lower at the upper point of the recovery than they had been prior to the crisis. The recovery of private investment may be significant, but usually private consumption rises rather modestly during the upswing, because of the fall in real wages.

4. - International financial institutions tend to present the upswing following the crisis as a successful story of a recovery from a crisis, and praise the economic authorities for their skills. However, their vision seems highly misleading, to put it mildly. On the one hand, the recovery, though it may be swift and strong, is usually very lopsided, and the working classes hardly benefit. On the other hand, the important change in the fiscal policy stance, which in most cases is essential for the recovery to take place, is forced on the government by the deterioration in the economic situation. The latter goes usually much beyond expectations, and gives rise to strong pressures from public opinion. Moreover, the expansionary fiscal policy stance, which spearheads the recovery and sustains private profits, is commonly made possible by the rise of the price of exports, or their volume or both. This gives the government the

possibility of enlarging its expenditure without incurring in a deficit, even as it amplifies the expansionary effect of government expenditure.

5. - Kalecki's theory of effective demand appears to be very useful in understanding the course of the typical economic cycle in Latin America. Since Kalecki did not analyze crises but business cycles, the turning points of both the downswing and the upswing in a typical Latin American cycle do not follow along the lines conceived in his cycle model but rather are caused by exogenous shocks. More specifically, expectations, on the one hand, and government expenditure on the other, tend to trigger the crisis and the recovery. But the general pattern of the upward and downward movement of the economy follow in general terms Kalecki's theory of effective demand.

6. - One exception to the previous statement must be made with regards to the financial conditions and monetary policy in present-day capitalism in general and the course of the cycle in particular. The study of the financial aspects of capitalism is an area where Kalecki's theory certainly needs to be completed and updated. Capitalism has greatly changed, and finance is probably the field where those changes are most significant. Most importantly, a high relative share of

financial liabilities and assets in the balance sheets not only of firms but also individuals, is a prominent feature of present-day capitalism. Unlike in Kalecki's model, changes in financial variables exert today a strong influence in the course of the evolution of capitalist economies. A great deal of work needs to be done in order to enrich Michal Kalecki's theory.

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ASPECTOS POLÍTICOS DO DEFICIT PÚBLICO

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I-Introdução

Aspectos Políticos do Pleno Emprego¹, de Kalecki, publicado em 1943 fornece explicação premonitória da retórica conservadora dos últimos vinte anos.

O objetivo deste artigo é reaplicar as proposições do artigo para analisar a evolução do deficit público nos Estados Unidos e no Brasil, tomados como países exemplo.

A seção seguinte revê as proposições de Kalecki ..

A terceira seção descreve o comportamento do deficit público brasileiro e americano nos últimos 20 anos a partir das proposições de Kalecki.

A quarta seção oferece explicação econômica adicional, baseada no modelo de crescimento de Harrod e na extensão que Tobin apresenta para este modelo.

Tentamos, nesta seção, mostrar como a retórica da política econômica conservadora acaba encobrendo a funcionalidade do deficit público para, indiretamente, garantir baixos níveis de emprego e a disciplina dos mercados de trabalho, como observamos em diversas economias no mundo nos últimos 20 anos.

Esta extensão dos resultados de Kalecki não consta nem podia constar da análise original de Kalecki, nos anos 40. Mas decorre naturalmente dos argumentos apresentados por ele.

O artigo conclue que :

- a- a retórica do controle do deficit público, que domina as prescrições de política econômica dos anos 80 e 90, é acompanhada por aumento nos gastos públicos.
- b- O aumento do deficit público pode ser explicado, basicamente, pela elevação das despesas da política monetária, ou seja, altas taxas de juros.
- c- O deficit público que garantiria o pleno emprego da mão de obra, nos tempos do Kalecki passou a ser deficit público de natureza diferente que garante a remuneração mínima para o capital (a required rate of return dos modelo de Harrod).

¹ Kalecki, Michal, Political Aspects of Full Employment, Selected Essays, (Londres: Cambridge University Press, 1971) publicado pela primeira vez em Political Quarterly, n4. 1943

- d- O conceito de deficit público acaba colapsando em conceito genérico , diferente do conceito específico da época de Kalecki e passa a representar apenas o horror ao governo, à política econômica preocupada com o desemprego e a inflação. Não se distingue mais política monetária e fiscal.

II- O artigo de Kalecki.

“É falsa a suposição de que um governo manterá o pleno emprego numa economia capitalista se êle souber como fazê-lo”(Kalecki,1943)

Clássicos, conservadores e empresários preferem a política monetária à fiscal, pois a política monetária não intervém no “livre” funcionamento dos mercados.

Além disto, poderíamos adicionar à economia política de Kalecki que a política monetária distribue poder de compra em função da distribuição de riqueza existente e portanto é preferível a fiscal.

Mesmo sabendo que a política monetária é ineficaz em muitas situações, como na época em que Kalecki escrevia, êle previa que o pleno emprego não seria mantido através de gastos públicos pois “os líderes industriais : “a) reprovam a interferência do governo no nível de emprego b) reprovam a direção da despesa governamental (para investimento público e subsidio ao consumo) c) reprovam as mudanças sociais e políticas resultantes da manutenção do pleno emprego “.

Limitada a intervenção dos gastos do governo, o nível de atividade da economia passa a depender do “estado de confiança “dos empresários. Assim , o peso político do pensamento empresarial passa a ser a variável mais importante no emprego e no ritmo de crescimento da economia.

Quando se consideram os investimentos públicos, o pensamento do capital seria menos relutante em aprovar investimentos públicos que não concorressem com o investimento privado (hospitais, escolas, infraestrutura). Mesmo assim, a iniciativa governamental em investimentos públicos poderia rapidamente expandir-se para investimentos em áreas em que concorressem com o investimento privado.

A reprovação seria maior, entretanto, nos casos de subsidio ao consumo popular ou apoio ao desempregado, pois iriam chocar-se de frente com a ética capitalista “ganharás o pão com o suor do seu rosto “.

Além disto, a manutenção do pleno emprego causaria mudanças sociais e políticas que dariam novo ímpeto a oposição. Os empresários perderiam a “disciplina da demissão” .

Como aceitar que empresários e investidores preferissem vendas menores e lucros menores ao pleno emprego ? Kalecki justifica esta alternativa como um investimento político dos capitães da indústria.

Lucros e vendas menores agora seriam compensados pela estabilidade inflacionária decorrente de salários nominais estáveis e pela estabilidade política.

“Uma das mais importantes funções do fascismo , como tipificado pelo sistema nazista era a de remover as objeções capitalistas ao pleno emprego”.(Kalecki,1943)

“A reprovação política da despesa governamental ” é superada no fascismo onde nunca há o “proximo governo”.

As proposições políticas são de certa forma simples e diretas.: o pleno emprego pode aumentar lucros e vendas mas tem altos custos, ameaçando a estabilidade monetária através de pressões salariais decorrentes do pleno emprego e a estabilidade política através da mudança do estado geral da sociedade em pleno emprego.

O desemprego é indispensável para manter a ordem do mercado de trabalho e conseqüentemente as ordens monetária e política.

Sòmente quando o poder político estiver na mão dos conservadores e sem risco de rodízio , o gasto público é aceitável. Neste caso, os riscos do pleno emprego não ameaçam as vantagens econômicas a ele associados.

III- A política economica do governo Reagan e a política economica brasileira recente.

III-1 O deficit público a partir da administração Reagan.

Os chamados 30 anos gloriosos do capitalismo , quando a economia mundial cresceu rapidamente com alto nível de emprego e inflação levemente crescente, culminam em 1979 , com a restauração da política econômica conservadora da Administração Reagan.

Deficit público, excesso de impostos , ineficácia dos gastos sociais são listados imediatamente como problemas principais da instabilidade da economia americana.

Na área fiscal, impostos são reduzidos, programas da área social são interrompidos sob a justificativa simplista da curva de Laffer , segundo o qual reduções de aliquotas de imposto aumentariam a receita tributária (com o que o keynesianismo e Kalecki concordariam, ainda que por outras razões).

O deficit público, entretanto, não se reduz.

E por várias razões :a) a politica de juros altos praticada pelo Federal Reserve deslança um crescimento espetacular da diivida pública american.b) o cambio flutuante desde 1973 , sobrevaloriza-se significativamente, aumentando odeficit comercial e reduz o nível de emprego e de atividades .

Ao mesmo tempo, a sobrevalorização cambial americana contribui com a redução da inflação através de importações muito maiores a preços constantes ou decrescentes.

O desemprego, que já vinha sendo chamado de “natural” por Milton Friedman há pelo menos dez anos, deixa de ser objetivo de política econômica ou é apenas o resultado automático da instabilidade monetária.

Em 1980, os Estados Unidos inauguram a política econômica que passaria a ser o paradigma vencedor para os próximos vinte anos: retórica de controle de déficit público associada a elevado déficit público devido a taxas de juros muito altas e baixo nível de atividade.

O conceito de déficit público de pleno emprego, tão comum e importante nos anos anteriores, é relegado a segundo plano.

A indisciplina do mercado de trabalho decorrente da prosperidade americana, o florescimento da contracultura, da guerrilha urbana e de diferentes movimentos de protesto nos anos 70 geraram a reação de política econômica prevista no artigo: a desarticulação dos programas sociais remanescentes da Great Society dos governos democráticos, a derrota dos movimentos sindicais a partir da greve dos controladores de voo americanos.

O artigo de Kalecki não previa câmbio flutuante e taxas de juros altas que não faziam parte do conjunto de possibilidades dos anos 40, quando vigoravam taxas cambiais fixas e controle forte sobre movimentos internacionais de capitais.

III-2 As novas regras de disciplina da ordem financeira internacional

A nova política econômica conservadora dos anos 80 se reflete imediatamente nas rotinas de controle e concessão de empréstimo do Fundo Monetário Internacional.

Os desequilíbrios de pagamento internacionais passam a ser debitados exclusivamente ao déficit público, a partir da identidade da contabilidade nacional.

Assim, os programas de apoio aos desequilíbrios do balanço de pagamentos se iniciam, nos anos 80, a partir da análise das contas públicas. (Polack,). Taxas de câmbio, preços internacionais, composição de exportações deixam de ser componentes importantes dos programas de ajuste do balanço de pagamentos.

O Banco Mundial que, antes dos anos 80, financiava projetos públicos de investimento, particularmente investimentos das empresas estatais brasileiras, passa a financiar programas chamados de “setoriais”. Programas setoriais são empréstimos de liquidez concedidos

em troca ou ao mesmo tempo em que o governo promove alterações de política econômica que promovam a liberalização de mercados ou setores da economia.

Assim ,em 1988, por exemplo, o Banco Central brasileiro recebe empréstimos do Banco Mundial desde que promova a abertura do setor bancário a novos concorrentes , os bancos múltiplos.

Para as economias latinoamericanas, a nova política econômica conservadora acaba sendo resumida nos pontos conhecidos do Consenso de Washington : controle de gastos públicos, liberalização comercial , equilíbrio orçamentário , privatização dos “investimento público “ mencionados por Kalecki e revisão dos programas sociais, particularmente os precários programas de previdência social e aposentadoria.

III-3 O deficit público do governo brasileiro

O artigo de Kalecki poderia ter previsto com precisão as linhas mais importantes da política econômica do governo militar a partir de 1964.

Logo depois do golpe de 31 de março o governo garante autonomia gerencial e tarifária para as empresas estatais brasileiras mais importantes, reunidas em grandes holdings setoriais , para o aço , energia elétrica, petróleo , petroquímica e telecomunicações.

Durante o período 1964-1985 , são estas as empresas líderes nos investimentos da economia brasileira ². Após a primeira crise do petróleo em 1974 são estas mesmas empresas que são selecionadas para realizar empréstimos internacionais destinados a substituir importações .

Dez anos depois, em 1974, o governo militar anuncia processo de democratização do país , com eleições livre programadas para o final do próximo mandato presidencial.

Coincidencia , ou como podia ser previsto pelo artigo de Kalecki neste mesmo ano o mais conservador dos jornais brasileiros, ” O Estado de S. Paulo” começa a publicar reportagens sobre a ineficiência das empresas estatais brasileiras e os gastos excessivos , chamados de “mordomias” , dos seus dirigentes.

Eleições livres e a redemocratização do país coincidem com a eleição das empresas estatais como responsáveis principais pelo deficit público , inflação e ineficiência das empresas brasileiras.

O conceito de deficit público se amplia , ao considerar empresas de propriedade pública como parte do governo e passa a funcionar como importante instrumento da retórica política e da política econômica como

² Reichstul, Henri Philippe e Luciano Coutinho,

restrição a expansão dos investimentos das estatais e da sua rentabilidade³.

Pelos critérios do FMI, os empréstimos das empresas estatais brasileiras, mesmo das mais importantes e que nunca dependeram do Tesouro Nacional, são considerados parte da dívida pública.

Assim, se uma empresa do tamanho da Petrobras, ou da Vale do Rio Doc exportadora decidie contrair empréstimo para financiar novo investimento, estes empréstimos passam a ser considerados variação da dívida pública e conseqüentemente, deficit público.

Por esta razão, investimentos públicos prioritários, autofinanciáveis e economizadores de energia e de importações, como os investimentos em telecomunicações ou mesmo na prospecção de petróleo são restringidos pela política econômica pois implicam em deficit público na contabilidade do FMI.

A partir de 1979, com a elevação subita das taxas de juros americanas e internacionais, decorrentes da nova política econômica da administração Reagan, os empréstimos externos, na maioria contratados com juros variáveis, exigem pagamentos excessivos e inesperados por parte dos devedores.

Assim, uma dívida de 100, com prazo de 10 anos contratada a juros de 10% a.a., exigia pagamentos de 10 todos os anos. Se os juros tivessem subido ao nível de 17% ao ano, por causa da inflação americana ou da nova política monetária, os pagamentos elevavam-se imediatamente a 17 por ano, um acréscimo de 70% no desembolso em moeda nacional e em dólares.

Esta modificação das taxas de juros americanas geraram logo em 1982, a crise da dívida externa latinoamericana.

No que se refere ao deficit público do país, a elevação dos juros nominais passou a ser considerada imediatamente, crescimento da dívida pública brasileira e portanto novo deficit público.

O critério contábil é enganoso e discutível. Se os juros subiram para compensar a elevada inflação americana, não deveriam ser considerados como nova dívida mas sim como correção monetária da dívida anterior, como acontecia por exemplo nos empréstimos habitacionais brasileiros.

Esta "correção" ou ajuste entretanto não foram considerados. O problema de balanço de pagamentos do Brasil passou a ser

³É verdade que empresas estatais poderiam ser utilizadas como instrumentos para "camuflar" o endividamento público. A empresa estatal poderia se endividar para manter saldo elevado de caixa que utilizado para compra de títulos públicos. Esta alternativa poderia ser excluída se os títulos públicos na mão das empresas estatais fossem considerados dívida pública for a do setor

automaticamente e por força de uma identidade contábil mal construída, atribuído ao “deficit público”.

As estatais brasileiras que haviam se endividado em dólares quase que compulsoriamente como parte da estratégia da política econômica de 1974 a 1979 passam a ser responsabilizadas por imenso “deficit público”, que refletia apenas os juros americanos mais elevados.

Desnecessário dizer aos leitores do artigo do Kalecki que “deficit” passou a ser sinônimo de prejuízo nos órgãos de comunicação e no discurso político.

Durante o período 1994- 1998 o governo brasileiro promove a privatização de quase todas as empresas estatais brasileiras . A privatização é justificada em termos da alegada baixa eficiência destas empresas, da necessidade de controlar o endividamento do setor público e da necessidade de obter dólares de investimentos diretos destinados a compra do controle das estatais.

A venda do controle destas estatais deveria se refletir em imediato e significativo decréscimo da dívida pública , independentemente do destino dos recursos obtidos, já que o endividamento destas empresas fazia parte do endividamento do governo.

Entretanto, as autoridades brasileiras e do FMI resolveram não considerar estas reduções por se tratarem de reduções únicas , “once and for all “. Além disto, pelo menos um quarto dos recursos das vendas das estatais foram financiados pelo BNDEs, banco de propriedade governamental , indo , portanto em direção contrária aos objetivos financeiros da privatização.

A enorme restituição do controle das empresas estatais não colocou o controle destas empresas sob a vigilância do mercado de ações, já que neste mercado negociam-se principalmente ações preferenciais. Não reduziu imediatamente a dívida pública por razões contábeis negociadas . Os significativos recursos financeiros obtidos foram utilizados na política de manutenção de taxa de câmbio fixa e sobrevalorizada.

A privatização que foi implementada em nome do controle do deficit público, entre outras razões, ou não resultou em significativa diminuição do deficit público ou foi financiada ainda que parcialmente pelo próprio setor público. O deficit público se converteu em motivação política para reduzir a concorrência do setor público nos mercados privados.

III-4 As previsões de Kalecki

A prosperidade e inflação americana são sucedidas por política económica conservadora nos Estados Unidos onde o governo e o desequilíbrio orçamentário aparecem como objetivos de controle mais importante, como sugeriria o artigo clássico de Kalecki.

O deficit público americano não se reduz durante quase duas décadas, mas análise e opinião pública não deixam de apontar o controle do deficit publico como responsável maior pela prosperidade americana e estabilidade monetária.

No caso do Brasil , a redemocratização é acompanhada pela estigmatização das empresas estatais como responsáveis por todas as mazelas da instabilidade inflacionária brasileira.

As previsões do artigo de Kalecki são bem ilustradas pelos dois eventos : o resgate do pensamento conservador americano e a estigmatização das empresas estatais brasileiras. São apenas dois exemplos embora o mesmo tipo de política tenha sido seguido em diversos países europeus e da América Latina.

As previsões precisariam ser complementadas, ou melhor qualificadas, em dois aspectos : primeiro, o deficit público não se reduziu nem nos Estados Unidos , nem em diversos países da Europa que seguiram a recomendação conservadora nem no Brasil.

Ao contrário , podemos observar deficits públicos crescentes acompanhados de alto nível de desemprego.

Para resolver a aparente inconsistencia, precisaríamos entender como o deficit público pode gerar desemprego e qual o real conceito de deficit público que está sendo utilizado. É o que faremos na seção seguinte.

IV – Como deficit público gera desemprego.

Quando Kalecki se refere a deficit público e manutenção do pleno emprego, está , evidentemente, pensando em política fiscal, ou seja na utilização de gastos públicos para complementar a deficiência de demandada agregada .

A nível analítico deveríamos ser capazes de diferenciar política fiscal e monetária, embora ambas estejam indissolivelmente ligadas .

Chamamos de política fiscal e deficit público aquela política que altera os fluxos de gastos e receitas do governo, mantendo constante o

estoque de dívida pública em relação a quantidade de outros ativos financeiros públicos, a moeda especialmente.

Assim, o aumento do deficit público seria política fiscal “pura “na medida em que fosse financiado por emissão da dívida pública e emissão de meios de pagamento de forma que a relação entre o saldo da dívida e o saldo de meios de pagamento ficasse constante.

A política monetária “pura “, por outro lado, mudaria o estoque relativo de dívida e meios de pagamento sem alterar a quantidade de recursos a disposição do governo.

A política monetária, por outro lado, pode ser realizada simplesmente pela fixação das taxas de juros básicas do Banco Central, sem que haja controle das quantidade de meios de pagamento ou de dívida pública.

O “controle do deficit público “ anunciado pela administração Reagan e pelo governo brasileiro foi acompanhado de tentativas de cortes de gastos públicos acompanhado de uma política monetária restritiva, pela prática de juros bastante elevados.

Juros elevados, ainda que fossem discrecionariamente fixados pelas autoridades monetárias são justificados pelas dificuldades em financiar gastos públicos elevados.

Os números, entretanto, não permitem aceitar a explicação. No caso do governo americano, a tabela abaixo mostra que a variação dos gastos públicos acompanha, quase que exatamente o deficit público. O mesmo se observa no Brasil.

Brasil (Dados em % do PIB)

	<i>Superávit Primário</i>	<i>Despesa com juros</i>	<i>Déficit Operacional</i>
1986	-1,60%	5,20%	3,60%
1987	1,00%	4,70%	5,70%
1988	-0,90%	5,70%	4,80%
1989	1,00%	5,90%	6,90%
1990	-4,60%	3,30%	-1,30%
1991	-3,00%	1,65%	-1,35%
1992	-2,31%	4,44%	2,13%
1993	-2,62%	2,37%	-0,25%
1994	-5,26%	3,90%	-1,36%
1995	-0,36%	5,24%	4,88%
1996	0,09%	3,66%	3,75%
1997	0,92%	3,39%	4,30%
1998	-0,01%	8,02%	8,02%

Fonte: Banco Central / Superávit (-)

EUA

	Déficit Público (Gov. Federal - US\$ milhões)	Despesa com juros (US\$ milhões)	Deficit Público/PIB	Juros/PIB
1986	-209,21	136,047	-4,73%	3,08%
1987	-166,56	138,652	-3,55%	2,95%
1988	-140,49	151,838	-2,78%	3,01%
1989	-154,99	169,266	-2,85%	3,11%
1990	-236,03	184,221	-4,11%	3,21%
1991	-265,60	194,541	-4,49%	3,29%
1992	-326,84	199,421	-5,23%	3,19%
1993	-226,54	198,811	-3,46%	3,03%
1994	-118,58	202,957	-1,71%	2,93%
1995	-146,17	232,169	-2,01%	3,20%
1996	-110,78	241,09	-1,45%	3,16%
1997	-2,44	244,016	-0,03%	3,02%
1998	-54,39	243,359	-0,63%	2,80%

Fonte: Bloomberg - IMF / FED

Obs: Déficit (-)

De qualquer forma, a retórica da política econômica insiste na proposição : os juros são elevados por que o deficit público é elevado, embora possamos ver pelos dados contábeis que o deficit público excluindo os juros é reduzido quando não é superavit , ao inves de ser deficit.

O artigo mais interessante e conhecido sobre a relação entre política fiscal e monetária ilustra bem o argmento conservador .⁴

Neste trabalho , Sargent argumenta que a política monetária não consegue contrabalançar os efeitos inflacionários e expansionistas do deficit público. Pois se , após um certo nível, o deficit público implicar for acompanhado por política monetária que pratique juros mais altos do que os juros “naturais “, dados pela rentabilidade do capital, investidores sabem que o governo será obrigado a monetizar a dívida .

Assim, a monetização da dívida prevista reflete-se , através do mecanismo de expectativas racionais, em previsão de inflação mais alta no futuro e imediatmante. Assim, deficits públicos acompanhados por política monetária restritiva causam inflação corrente.

A política monetária é impotente para controlar a expansão da demanda agregada gerada pelos gastos públicos superiores a receita tributária.

O professor Sargent está , criticando indiretamente a política do periodo Reagan, quando o deficit público foi acompanhado por fixação de juros muito elevados por parte do Federal Reserve . Sem reconhecer,

⁴ Sargent,T.J."Some Unpleasant Monetarist Arithmetic ".Quarterly Review 5,Federal Reserve Bank of Minneapolis,1983,p1-17 incluído em T.J.Sargent, Rational Expectations and Inflation,2nd ed. Nova Iorque, Harpert Collings College Publishers, 1993.

entretanto, que a magnitude do deficit público gerado pela administração Reagan poderia ter sido acompanhada por diferentes tipos de política monetária.

A ligação entre as duas políticas entretanto passa a fazer parte da discussão sobre a questão da manutenção do nível de atividade da economia. A política fiscal é inflacionária se eleva as taxas de juros acima das taxas de “juros naturais “. O desemprego natural é inevitável.

Refletindo mais cuidadosamente, as previsões de Kalecki , por se aterem ao lado fiscal, eram incompletas.

Se os “capitães da indústria “se colocassem contra o deficit público , corretamente definido, a demanda agregada se reduziria , sem dúvida, mas o capital não teria retorno suficiente nem aplicação alternativa. A demanda agregada não se reduziria e o desemprego seria impossível.

Se não existisse dívida pública e moeda que pudessem ser o destino final dos lucros ou dos investimentos não realizados , a demanda agregada e o emprego não se reduzem.

Ao mesmo tempo, sem dívida pública e taxas de juros altas é muito difícil conceituar qual seria a taxa de juros “natural “, acima da qual haveriam expectativas inflacionárias .

As previsões de Kalecki precisam ser complementadas da mesma forma que o modelo de Harrod foi qualificado e complementado por Tobin⁵.

No modelo clássico de Harrod, a economia capitalista estaria sempre oscilando entre superemprego e inflação, por um lado e desemprego e deflação, de outro lado. Isto ocorreria por que o capital exigiria uma taxa mínima de retorno (required rate of return) compatível com uma relação capital /produto fixa e uma determinada quantidade de trabalho por capital.

Se esta relação capital / produto e capital trabalho fossem compatíveis com o crescimento demográfico da população economicamente ativa, estaríamos em equilíbrio monetário e real. Do contrario, desequilíbrio.

Tobin se perguntou como se determinaria a taxa mínima de retorno do capital e quem estaria disposto a pagá-la . Apresentou como resposta a taxa de retorno dos ativos financeiros determinada nos mercados de capitais e pelo Banco Central. Aí estaria a origem dos desequilíbrios da economia capitalista.

No caso das previsões de Kalecki , a mesma complementação precisa ser feita. A “disciplina do mercado de trabalho “ e o desemprego só podem se tornar efetivos e uma estratégia aceitável para os “capitães

⁵ Tobin, James .Money and Economic Growth

da indústria “se existir uma taxa de retorno alternativa para o capital que não retorna para a economia como investimentos produtivos.

O estado de confiança dos empresários só é importante se capitalistas tiverem alternativa de investimentos no mercado financeiro nacional ou internacional que garanta a sua rentabilidade e o desemprego , ao mesmo tempo.

Sem esta alternativa, o estado de confiança dos empresários não tem importância. Pessimistas, guardam dinheiro no cofre. Isto gera desemprego, mas a menos que provoque deflação, não garante a rentabilidade do investimento e dos lucros. Se não houver deflação, precisam investir em alguma coisa , imóvel ou planta, que reverteria o nível de emprego.

Portanto as previsões de Kalecki precisavam se estender para a política monetária. A realidade se encarregou de complementar a previsão.

O controle dos gastos públicos sempre foi acompanhado de política de juros muito altos que conseguiam oferecer ao investidor “pessimista” ou inseguro com o estado das coisas aplicação alternativa ainda mais rentável, os elevados juros da dívida pública.

A mobilidade do capital entre diferentes mercados financeiros que crescia desde meados dos anos 60, se consolida a partir dos anos 70 e garante , mais uma vez, usos alternativos para o capital nacional descontente com a política do mercado doméstico.

Os capitalistas não precisam, nem conseguem , fazer um investimento político no desemprego sem a existência de uma dívida pública ou moeda que garanta a aplicação dos recursos excedentes sem que a demanda agregada e o emprego se elevem.

Assim, a retórica do controle do deficit público prognosticada por Kalecki foi capaz de prever com exatidão e atenuação de quase 40 anos, a política econômica que sucedeu os 30 anos gloriosos do capitalismo , com pleno emprego que culminou com a indisciplina dos mercados de trabalho e inflação do final dos anos 70.

Mas esta retórica encobre parte do mecanismo capaz de prever o pleno emprego e dar peso político ao “estado de confiança” dos empresários .

Para que o horror ao deficit público possa se materializar , precisa ser complementado por política monetária restrita que ofereça alternativa lucrativa para o capital .

A retórica do deficit público é portanto complementada : o “alto deficit” provoca a elevação dos juros , onde o capital se “refugiar “, obter retorno atraente e garantir o desemprego disciplinador do mercado de trabalho.

Desta forma, as previsões de Kalecki ficam completas : a política empresarial impede gastos públicos que garantam o pleno emprego e

fazem crescer o deficit público através da criação de uma dívida pública de alta rentabilidade que oferece, por assim dizer, o seguro desemprego para o próprio capital, ou uma espécie de renda mínima para o capital, independentemente do estado da economia.

O conceito de deficit público perde a nitidez : é o Banco Central quem fixa a parte mais importante da despesa pública, os juros, que podem influenciar a demanda agregada através de aumento do consumo, já que juros compõe a renda disponível do setor privado.

No caso brasileiro, particularmente após 1990, os conceitos são embaralhados e transformados tão completamente que parece impossível reordená-los .

A retórica oficial acusa estatais, gastos sociais ,gastos previdenciários como responsável pelo deficit público. Os dados da tabela abaixo mostram que o deficit primário foi muitas vezes negativo (superavit) ,na maior parte do tempo, muito pequeno. As despesas de juros, entretanto, sempre foram maiores do que x% do produto e crescentes nos anos recentes .

A complementação do artigo do Kalecki não retira sua atualidade ou a sensibilidade e precisão de suas proposições. Os economistas estavam enganados quando pensavam que ao desvendar os mistérios do funcionamento da economia capitalista e particularmente os instrumentos de controle da demanda agregada, pudessem resolver o problema do desemprego. O desemprego é de fato funcional e o verdadeiro instrumento de estabilização e manutenção da ordem monetária.

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